The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 272.---Vol. X.] LONDON: SATURDAY, NOVEMBER 7, 1840. [Price 6d.

PUBLIC COMPANIES.

MEETINGS.

CANDONGA MINING ASSOCIATION.—Notice is hereby given, that a SPECIAL GENERAL MEETING of the proprietors of the said association will be held on Monday, the 7th day of December next, at 9, Nicholas-lane, in the city of London, at One o'clock in the afternoon precisely, for the purpose of taking into consideration the propriety of dissolving the said association, in pursuance of the recommendation of the court of directors, and for adopting such measures as may be necessary for carrying into effect the dissolution of the said company. By order of the board of directors,

London, November 5. G. H. HEPPEL, Sec.

REDMOOR CONSOLIDATED MINING COMPANY.—Notice is hereby given, that a SPECIAL GENERAL MEETING of the shareholders of this company will be held at the office of the company, 44, Finsbury-square, London, on Wednesday, the 11th day of November instant, at Two o'clock precisely, for the purpose of considering the propriety of increasing the capital of the company, by adding the sum of £2 per share to the several shares thereof, so as to make the same shares £7 shares instead of £5 shares, as the same now are, such increase of capital to take place under the terms and conditions to be then approved of by such meeting; and further take notice, that another SPECIAL GENERAL MEETING of such shareholders will be held at the same office, on Wednesday, the 18th day of November instant, at the same hour, for the purpose of confirming or rescinding such resolutions as may be passed at the meeting first advertised.—Finsbury-square, Nov. 4.

WEST CORNWALL MINES INVESTMENT COMPANY.—Notice is hereby given, that a SPECIAL GENERAL MEETING of the shareholders of the West Cornwall Mines Investment Company will be held at the George and Vulture Tavern, in the city of London, on Friday, the 20th day of November inst., at Twelve o'clock at noon, for the purpose of taking into consideration the propriety of dissolving the said company, and also for the purpose of taking into consideration the propriety of instituting proceedings against the late cashier of the company, to recover the sum now standing to his debit in the company's ledger; and that another SPECIAL GENERAL MEETING will be held on Monday, the 23d day of November inst., at Twelve o'clock, at the place aforesaid, for the purpose of confirming, altering, or rescinding, the resolutions that may be passed on the previous Friday, By order of the directors,

Dated, Truro, November 2. THOMAS DRYDEN, Sec.

WEST LONDON RAILWAY (late BIRMINGHAM, BRISTOL, AND THAMES JUNCTION RAILWAY).—Notice is hereby given, that the Ninth General Half-Yearly Meeting of the West London Railway Company having been further adjourned from Wednesday, the 7th day of October inst., till Wednesday, the 11th day of November next ensuing, such ADJOURNED GENERAL MEETING will be held at the offices of the company, No. 11, Abchurch-lane, in the city of London, on Wednesday, the said 11th day of November next, at One o'clock precisely. WM. MORGAN, Deputy-Chairman.

Office, 11, Abchurch-lane, October 30.

CALLS.

GREAT WHEAL CHARLOTTE MINING ASSOCIATION.—The directors hereby give notice, that they have this day made a CALL, of the remaining FIVE SHILLINGS per share on the new shares created on the 17th day of February last, to be paid on or before the 19th instant, to Messrs. Barclay, Bevan, and Co., 54, Lombard-street; and all such shares upon which the said call shall not have been paid within fourteen days from the above date, will be absolutely FORFEITED.

Lawrence Pountney-hill, November 5.

TAFF VALE RAILWAY.—CALL OF FIVE POUNDS PER SHARE.—The directors of the Taff Vale Railway Company, acting under the provisions of the act of incorporation, hereby give notice, that the proprietors of shares are required to pay, on or before the 9th day of November next, to any one of the undermentioned bankers, the sum of FIVE POUNDS on each of their respective shares:

London and Westminster Bank, London.
Monmouth and Glamorgan Bank, Cardiff.
Messrs. Baillie, Ames, and Co., Bristol.
Messrs. Wilkins and Co., Merthyr.

By order of the board of directors,

Railway Office, Cardiff, Oct. 16. JOSEPH BALLS, Secretary.

TAFF-VALE RAILWAY.—Notice is hereby given, that this RAILWAY is NOW OPEN to Navigation-House, within nine miles of Merthyr. The times of departure of the trains are as follows:—

	Morning.	Afternoon.
From Cardiff to Navigation-House	8	3
From Navigation-House to Cardiff	9	4

Conveyances will be at the Navigation-House for the conveyance of passengers to Merthyr upon the arrival of each Train.

By order of the board of directors,

Railway office, Cardiff, Oct. 9. JOSEPH BALL.

THAMES TUNNEL.—Open to the public every day (except Sundays) from Nine in the morning until dark.—Admittance One Shilling each. The Tunnel is eleven hundred and forty feet in length, brilliantly lighted with gas, and the entrance is on the Surrey side of the river, close to Rotherhithe Church. The Shield is advanced to within the limits of the company's wharf at Wapping, and visitors are now allowed to pass under the entire breadth of the river, and to approach the shield. By Order,

Company's Office, Walbrook-buildings, Walbrook, November 5, 1840. J. CHARLIER, Clerk to the Company.

N.B.—Conveyances to Rotherhithe, by omnibus, from Piccadilly, Charing Cross, Fleet-street, and Gracechurch-street; and, by steam boats, from Chelsea, Vauxhall, Lambeth, Hungerford, Queenhithe, the Old Shades Pier, and London Bridge, to the Tunnel Pier at Wapping.

THE LONDON STOCK AND SHARE LIST, published every Saturday evening. Terms, £1 1s. per annum. Postage, 6s. extra, payable in advance.—This List contains the closing prices of each day's actual transactions upon the Stock Exchange, from Monday to Saturday inclusive. The length in miles, miles opened, number of shares, amount per share, amount paid up, last calls, amount of traffic, last dividend, and present value of the chief Railways in the kingdom. The present nominal value, and every other essential particular, of the principal Insurance Companies, Joint Stock Banks, Bridges, Docks, Institutions, Canals, Gas Light Companies, Water Works, British and Foreign Mines, and other Miscellaneous Joint Stock Companies, North American Securities, Government Funds, Foreign Stocks, Course of Exchange, Bank of England Averages, Private and Joint-Stock Bank Circulation, Grain Averages, Remarks upon the Money Market, &c. This List is got up in a most convenient form for binding—is peculiar for its lucid arrangement, and contains more matter than any other similar publication. The same proprietors also publish THE LONDON DAILY STOCK AND SHARE LIST, in which is given the actual daily transactions upon the Stock Exchange to Four o'clock p.m. Published every evening.—Terms £3 3s. per annum. Postage 10s. extra, payable in advance. They likewise publish A DAILY LIST OF NOMINAL QUOTATIONS, containing the "Jobber's" nominal prices of the leading Railway Shares, Consols, and Spanish, at the commencement of the day, Ten o'clock a.m. and at the close of the market, four o'clock p.m.—Published every evening. Terms £3 10s. per annum. Postage 10s. extra, payable in advance.

These Lists have been established nearly twelve months, under the patronage of the most eminent members of the Stock Exchange, Bankers, and other Capitalists interested in Public Securities, and are attended to by parties who have access to the best information, and are practically acquainted with the markets.

*** Orders for the regular supply of the above Lists to be forwarded to the proprietors, J. S. TRIPP and Co., 12, Copthall-court, London.

THE CIVIL ENGINEER AND ARCHITECT'S JOURNAL, SCIENTIFIC and RAILWAY GAZETTE, price One Shilling and Sixpence.—The November Number contains—Drawings and description of the Rotation Railway—Experiments on Clothing of Steam Boilers, by T. Wickstead, C.E.—Report on the Thames Embankment—Act for Regulating Railways—On the Theory of Tolls on Canals and Railways—Remarks on Long and Short Stroke Engines—Remarks on Competition Designs—Architectural Criticisms—New Inventions and Improvements—Reports of Proceedings of the British Association and Institute of Civil Engineers—Reviews of New Books—List of New Patents, &c., &c.

H. Hooper, Pall-Mall East; R. Groombridge, Panyer-alley, Paternoster-row.

THE INVENTORS' ADVOCATE, AND JOURNAL OF INDUSTRY, a WEEKLY BRITISH and FOREIGN MISCELLANY of SCIENCE, INVENTIONS, MANUFACTURES, and ARTS, is the most useful and comprehensive work of the kind published. It contains the scientific intelligence of the week; correct information on railways and steam navigation; list of patents granted and expired; specifications and descriptions of new inventions; reports of scientific meetings, and original papers on manufactures and the arts; with a variety of information interesting to inventors and patentees. It is not only a journal of interest for the day, but forms a standard work of reference, valuable to persons engaged in scientific, manufacturing, and mechanical pursuits. Vols. I and II, neatly bound, are already published, and the 3d Vol. is now in course of publication.

The *Inventors' Advocate*, price Fivepence, postage free, is published weekly, by the proprietors, at the patent office, No. 192, Strand, London.

MECHANICS of SCIENTIFIC INGENUITY (who wish to show the process of their works to the PUBLIC) are invited to make early application at the POLYTECHNIC INSTITUTION, for the remaining positions appropriated for that purpose—WORKING MODELS, and other INVENTIONS which may tend to demonstrate PRACTICAL and EXPERIMENTAL SCIENCE—also, first-class WORKS of ART, are now received, and will be brought before the PUBLIC at the RE-OPENING of the INSTITUTION on the 30th instant, without expense to the depositors, whose names will be placed on the free list.

309, Regent-street, November 7. R. J. LONGBOTTOM, Sec.

N.B.—Mr. Maugham lectures to a CHEMICAL CLASS, and conducts analyses and assays in the LABORATORY.

TO CAPITALISTS.—WANTED to RAISE, by way of annuity, at a liberal rate of interest, upon security of extensive slate quarries, iron-stone mines, and other property, in Carnarvonshire, North Wales, the sum of £3,000 or £5,000. There are most extensive machinery, tram and railroads, on the property, and as the mines and quarries are now in a most flourishing and productive state, and the parties borrowing of the highest respectability, it is presumed that upon inquiry the security will prove amply satisfactory. For further particulars apply by letter to "S. H.," care of Mr. Haslam, 42, Chancery-lane.

NUDILLALES GOLD STREAM WORKS AND LAND COMPANY.—Public notice, according to the regulations in the prospectus, is hereby given, that all SHARES in this company upon which the DEPOSIT of £1 per share shall not have been paid, on or before the 7th of December next ensuing, will be FORFEITED for the benefit of the said company.

1, Warnford court, November 6. JAMES PERRY.

SAFETY ROTATION RAILWAY.—Mr. RANGELEY, having obtained PATENTS for his new invention, is now prepared to grant LICENSES to companies to use the same. Mr. R. begs to state, that the principle of his railway combines economy with perfect safety in travelling, by stationary engines, at thirty or more miles per hour. Models and drawings may be seen at the patentee's office, No. 17, Southampton buildings, Chancery-lane, London.

ANDREW SMITH'S PATENT WIRE ROPE.—WILLIAM FOX and CO. having obtained the exclusive license for MANUFACTURING the above ROPE, beg to inform the public that SPECIMENS may be seen at their office, No. 78, Old Broad-street, London, where every information may be obtained, and also at the following places:—

Fox, Hawkins, and Hickling, wire drawers	Birmingham.
Robertson and Co., 12, Goree Piazzas	Liverpool.
Matthias Dunn	Newcastle-on-Tyne.
Joseph Bothway	Plymouth.
Thomas Mooney and Sons	Dublin.
Coates and Young	Belfast.
James Kibble and Co.	Glasgow.
James Gunn	Leith.

The rope is now at work in various mines in different parts of the kingdom, and also on the Blackwall Railway, where it answers every expectation. It has been used in shipping five years.

NEW METALLIC ROPE.—NEWALL'S PATENT.—These ropes have been found, by experience, to possess very great advantages over every other kind of rope or chain for mines and railways. They are STRONGER, LIGHTER, CHEAPER, and MORE DURABLE. Arrangements are being made for adequately supplying the demand. Parties requiring such ropes are requested to make application to the patentees, R. S. Newall and Co.

Dundee, August 24.

YORKSHIRE and LANCASHIRE CENTRAL AMERICAN LAND AND EMIGRATION COMPANY.

DIRECTORS.

EDWARD PARKINS, Esq., Chairman.
Thomas Reynolds, Esq. | Alexander Oswald, Esq.
Thomas Reynolds, jun., Esq.
With power to add to their number.

Secretary—Thomas M'William, Esq.
Superintendent of the Colony—W. Upton, Esq.
Bankers—Messrs. Wright & Co., 5 and 6, Henrietta-street, Covent-garden.
Solicitor—R. B. Gargrave, Esq., 19, Buckingham-street, strand.
London Office, 37, Great St. Helen's, Bishopsgate-street.

The company are prepared to deliver land orders for sections, of 100 acres each, at 5s. per acre. Their lands, which are situate between the rivers Tinto and Plantain, in Victoria Province, Central America, are held by a grant from the native king, who enjoys British protection, and the government of his country is regulated by British commissioners, under the presidency of her Majesty's superintendent of Honduras. The climate of this country is one of the finest in the world, and the soil is abundantly fertile, producing all that usually grows in North America and the West Indies.

Further information can be obtained by application to either of the agents, or the secretary.

THAMES HAVEN DOCK AND RAILWAY to LONDON, by Horndon, Orsett, Upminster, and Hornchurch, to join the Eastern Counties Railway at Romford.

Capital £450,000, in 9000 shares of £50 each. £5 paid.

Already incorporated by Act of Parliament.

This undertaking is founded upon the principle of substituting twenty-seven miles of railway travelling for thirty-six miles of river navigation. The advantages to be gained by this substitution, in point of time, safety, and convenience, will be instantly appreciated by all who have experienced the trouble, danger, and delay of landing from or embarking on board steam vessels by aid of small boats at the different stairs below London-bridge, more especially when women and children are of the party, and when the state of the tide renders it necessary to land or embark at night.

The Thames Haven Dock is situate thirty-six miles down the river, with such deep water at the entrance as to admit the largest vessels at low water. The increase of steam navigation, not only in the number of vessels, but in their size and power, renders a dock of this description, placed at the very entrance of the Thames, in deep water, and secured from all winds—an acquisition of the greatest value, not only to steam passengers, but to the shipping generally, as all the delays expenses, and hazards of collision incident to the river navigation will be greatly diminished, and, in many instances, absolutely removed. Hence it may reasonably be expected that a great proportion of the trade of the port of London, especially that which requires large wharfage or warehousing accommodation, will be transferred to the Thames Haven, no less to the relief of the crowded river than to the profit of the proprietors.

The advantages to passengers are a convenient landing or embarking place, a shorter voyage, and the means of reaching London within an hour, without increase of expense. It will prevent the necessity of embarkations at night, bring Ostend, Calais, and Boulogne always within a daylight voyage, and render the journey to Havre as short as by Southampton, at half the price. It will also enable visitors to Southend, Herne Bay, Margate, and Ramsgate, to reach those places at such time of the day as may be most convenient to their business (an advantage that has done so much for Brighton), as boats can go and return all day long. It will bring the important dock-yard of Sheerness within an hour and a half's communication with the Admiralty in case of a northern war—a matter of the very first consequence—and give that facility generally to steam navigation which the crowded state of the river now precludes. The dock will be constructed complete for £30,000, the contract being for £22,000, without warehouses or buildings. The company has already agreed for the purchase of 200 acres of land. The railway does not present a single engineering difficulty, and may be formed for about £20,000 a mile.

It will not escape the most careless observation that this enumeration of the direct advantages of the project omits many collateral and ultimate resources of gain to the company of far larger extent, and that may hereafter profitably employ a capital of ten times the amount that it is now intended to raise. The reduction of 6s. a ton in the price of coals, when delivered at Thames Haven, will naturally attract to that spot all those trades and manufactures which call for a large consumption of them. Ship-building, and, many works incident to it, such as sail-making, ropemaking, &c., could be there carried on with greater facility and dispatch; and rent, for the extensive premises such works require, would be incalculably lower.

A satisfactory arrangement has been made with the Eastern Counties Railway Company for the use of their line from Romford to London.

It only remains to be observed that 4300 shares have been already taken and registered, and that, as all the usual preliminary expenses have been already incurred and paid, and the Act of Parliament obtained, no further call will be made till all the shares created by the Act (9000) have been subscribed.

Applications for shares, plans, and prospectuses, to be made to Messrs. Lyon, Barnes, and Ellis, 7, Spring-gardens; or to Sir George Stephen, 17, King's Arms-yard, city.

HENRY AMBRICE, Sec.

THE PATENT SAFETY FUSE, FOR BLASTING ROCKS IN MINES, QUARRIES, AND FOR SUBMARINE OPERATIONS.—This article affords the safest, cheapest, and most expeditious mode of effecting this very hazardous operation. From many testimonies to its usefulness with which the Manufacturers have been favoured from every part of the kingdom, they select the following letter, recently received from John Taylor, Esq., F.R.S., &c. &c.:—

"I am very glad to hear that my recommendations have been of any service to you. They have been given from a thorough conviction of the great usefulness of the Safety Fuse; and I am quite willing that you should employ my name as evidence of this."

Manufactured and sold by the Patentees, BICKFORD, SMITH, and DAVEY Cambourne, Cornwall.

WHEAL RICHMOND MINE, in the parish of Wendron.

Superior 30-inch steam-engine, with boiler, and lifting pumps, chains, capstan and shears, rope, and other excellent mining materials.

TO BE SOLD BY AUCTION, on Wednesday, the 11th of November, 1840, at WHEAL RICHMOND MINE, in the parish of Wendron, Cornwall, all the SUPERIOR MATERIALS of the said mine, comprising a superior 30-inch steam-engine, with boiler, &c. (made by the Hayle Company, under the immediate inspection of Captain N. Vivian, has been but little used, and is in excellent condition), rods, plates, buckets, capstan, shears, stays, and rope, horse whim, shaft tackle, whim rope, chain, &c., windbores, door pieces, working barrels, lifts of 7, 8, 9, and 10-inch pumps, scale beam and weights, 42-inch smith's bellows, smith's tools, anvil, rod plates, iron bars, kibbles, ladders, barrows, carpenter's tools, timber fittings, and erections of carpenter and blacksmith's shops, counting-house fittings, and various other articles.

Sale to commence precisely at eleven o'clock. The materials, which are well worth attention, being nearly new, may be viewed any day before the sale on applying to Captain Pascoe, on the mine; and for further particulars, apply to D. H. Hainselin, auctioneer, 1, St. Aubyn-street, Devonport.

Active Life Assurance Office, Devonport, Oct. 21.

TO BE SOLD, by PRIVATE CONTRACT, that extensive coal-field known as the HAZLERIGG COAL MINES, together with the long-established, and valuable current-going colliery, called FAWDON COLLIERY, situated about three miles north of Newcastle-upon-Tyne, with all the fixed and moveable stock thereon.

The coal, which is the High Main, or Wall's End seam, is of excellent quality for domestic purposes, and has been well known in the London and coast markets for the last twenty-six years as "Newmarch's Wall's End." A new winning was completed between one and two years ago, and a pumping-engine erected thereon, considerably more than competent to the fullest requirements of the colliery, and no outlay will be needed in the winning of new portions of coal to this colliery for a long period of years. The great extent of the Hazlerigg coal-field, comprising about 4800 acres, affords the opportunity of establishing other valuable collieries.

For further particulars, application may be made to Mr. James Easton, the colliery viewer; to Mr. Thomas Forster, Haswell colliery; to John Wilkinson, Esq., solicitor, Hull; to Messrs. Bell, Brodrick, and Bell, solicitors, Bow Church-yard, London; or to Messrs. Carr and Jobling, solicitors, Newcastle-upon-Tyne.

Newcastle, November, 1840.

TURNING LATHES of various sizes, circular saw mills, hydraulic, copying, and screw presses, cranes, blocks and falls, smiths' anvils, Bilston grindstones, screwing tackle, and various mechanical implements, TO BE SOLD extremely cheap. Apply to Messrs. Galloway and Son, engineers, West-street, Smithfield, between the hours of Ten and Five o'clock.

ON THE ECONOMY OF RAISING WATER FROM COAL MINES ON THE CORNISH PRINCIPLE.

At the annual meeting of the members of the Manchester Geological Society, held at their rooms, on Thursday, the 29th ultimo, Mr. Fairbairn read a communication "On the Economy of raising Water from Coal Mines on the Cornish Principle." In introducing his paper to the meeting, Mr. Fairbairn, after explaining the sections of the engine and pumps made by him for some Belgian coal mines, said, that the improvements introduced, of late years, into the Cornish engines, were of so important a nature as to be highly worthy the attention of the miners of this district. They had not, till very lately, the slightest conception of the great saving effected by the performance of the Cornish engines, which was so great, that the pressure of steam in the cylinder, which would amount to 7500 lbs. per square inch, would raise nearly double the amount of any in the neighbourhood, chiefly from the advantages of the expansive principle adopted in the Cornish engine. Mr. Fairbairn then proceeded with his paper, of which the following is an abstract:—

The steam-engine performs so important a part in almost all the transactions of man, where great power is required, that the progressive improvements of this mighty agent, indispensable to the miner, must be regarded with interest by all. By the geologist its improvement will be looked at with additional pleasure, since by its means he is enabled to explore the earth to a much greater depth than he otherwise could have done. For this reason, I have thought it might not be out of place to give here some account of the progress of the steam engine during the last 120 years, mentioning the dates of its leading improvements. From the time of Savery and Newcomen, in 1707, to that of Beighton, in 1717, it remained stationary till 1769, when Smeaton introduced considerable improvements upon atmospheric engines, the average duty from fifteen of which amounted to 5,590,000 lbs., lifted one foot high by a bushel of coal.* These improvements continued; and the duty, in 1772, was raised to 9,450,000 lbs. Mr. Watt's improvements commenced in 1776, when the average duty was declared at 21,600,000—more than double that of Smeaton's; and, during the years 1778-9, it was still further increased. In 1779, and from that to 1788, Mr. Watt introduced the improvement of working steam expansively, which raised the duty to 26,600,000. From 1788 to 1812, few, if any, improvements were made in the Cornish engines; and, provided we except the plunger pole, which was introduced about this time, I question whether the Cornish engineers and miners did not retrograde rather than advance during a period of twenty-four years. In 1814 considerable advances were made, which raised the duty to 32,000,000 lbs. During that year, Woolf's engine, with two cylinders, was introduced, which again advanced the duty to 54,000,000 lbs. Mr. Woolf, above all others, did most for the Cornish engines, by showing the advantages peculiar to high-pressure steam, and prepared for subsequent improvements, which led to the present effective system of expansive working. During a period of six years, from 1814 to 1820, Woolf's double cylinder engine maintained its superiority, and gave a higher duty than any other. Woolf's engine, in process of time, gave way to others of a better construction. They were introduced by Captain Samuel Grose, whose experiments upon the generation and preservation of heat led to great improvements, and ultimately established a new era in the history of the Cornish engine. In 1826, Captain Grose's engine, at Wheal Hope, attained a duty of 62,000,000 lbs.; and, in July of the following year, one of Mr. Woolf's single cylinder engines performed the unprecedented duty of 67,000,000 lbs. From this time Capt. Grose's improvements were appreciated, and generally introduced; they led to a still greater advance in the duty, which this year reached as high as 87,000,000 lbs. Messrs. Lean and Brothers report the duty of a few of the Cornish engines at this time as follow:—

	Millions lbs.
Wheal Towan engine	67·0
Wheal Hope	74·0
Consols	67·0
Binner Downs	65·5
Consols	61·7
Consols	61·0
Wheal Vor	61·1
Wheal Towan (Bruce's)	59·4
Consols	66·4
Poldice	67·0
Wheal Vor	61·9

These give a mean duty of 64,000,000 lbs.

Nothing remarkable took place till 1834, when the duty was raised to 90,000,000 lbs. Since then it has continued to increase in the ratio of 90, 100, and 110,000,000; and during the last meeting of the British Association at Glasgow, Mr. Taylor reported the present duty at the unequalled performance of 123,300,593.† Having briefly stated the progressive improvements that have taken place in the Cornish system of pumping, I would now direct the attention of the society to the important results which these improvements have produced. The quantity of coal consumed by all the engines working at the mines in Cornwall, in the year 1835, was, according to Messrs. Lean and Brother, 1,669,421 bushels. Now, if we compare this with the number of bushels which

* Duty is a term first used by Mr. Watt for ascertaining the comparative merits of steam engines. In Cornwall it is used for determining the number of millions of pounds of water lifted one foot high by a bushel of coal (94 lbs.), the time of lifting it not being considered.

† The report made by Mr. Taylor was the duty which had been performed by one engine—the average duty being considerably below that stated.—Ed. M. J.

would have been consumed to produce the same power in 1814, we should have, for the consumption at that period, 4,049,878 bushels—making a saving of 99,186 tons; which, taken at 17s. per ton (the price of coal in Cornwall), we have the enormous saving of 84,308*l.* From the above facts, it cannot be doubted, that the improvements in steam-engines, and the consequent saving thus effected in the consumption of fuel, are matters of deep importance. Even in districts where coal is cheap, it is a consideration well worthy of attention; and we are assured by geologists, that the cost of this country, although abundant, will not last for ever.

In the course of a very interesting discussion which followed the reading of the paper, Mr. FAIRBAIRN said, he might mention that so great was the saving from the improved system of working the Cornish engines, that it was not improbable that, in this neighbourhood, we might come back to the old system of power for factories. If the duty performed by the Cornish engine was so much more than of any factory engine in this district, it might be desirable to have a Cornish engine connected with a water-wheel to drive mill machinery.

Mr. BOOTHMAN—Why not apply it to rotatory motion?—Mr. FAIRBAIRN said, that it would not apply to any thing where the force required was constant. The value of the thing lay in overcoming the inertia of matter. The Cornish engine first raised a weight, and then by the descent of that weight it raised the water. That was the whole secret of the Cornish engines.

Mr. P. CLARK asked if Mr. Fairbairn had made a calculation of the effective force of the factory engines in this neighbourhood, so as to afford a comparison as to the combustion of coal by them with that of the Cornish engines?—Mr. FAIRBAIRN said, he had done so. The consumption of fuel in our best condensing engines here was 10 lb. to 12 lb. per horse-power per hour; while the consumption of fuel by the best Cornish engines was only 2¼ lb. per horse-power per hour. In other words, we consume four times more coal than the Cornish engines in producing the same effect. The circumstance was most extraordinary; but the facts were before the meeting. The returns of the duty performed were regularly registered in Cornwall, and published monthly, so that any gentleman might see them, in reference to any period; and it would be found, that the performance of the best Cornish engines (for he did not, in reference to this question, speak of the average duty) did not exceed a consumption of 2¼ lb. of coal per horse-power per hour.

A MEMBER asked whether there was not some doubt as to the accuracy of the calculations of the duty performed by the Cornish engines, and as to the mode of estimating them?—Mr. FAIRBAIRN said, that the calculations were made upon the area of the bucket and the length of the stroke. He was aware that doubts had been expressed as to the accuracy of the calculations, but they were backed by such authorities, and the returns were so numerous and regular, that he thought their general accuracy could not well be doubted.—The MEMBER observed, that a small quantity of air coming up the pumps would make a difference.—Mr. FAIRBAIRN: No doubt; but still the engine has to lift this great weight of all the pumps and iron work, and the plungers, which must be lifted by the force of steam. He had a return from Mr. Wicksteed, of the East London Water Works, which was not a pit at all; but the Cornish engine there was used to raise water for the supply of the eastern part of London—which return gave a duty of 118,552,475 lbs. raised one foot high; the consumption of fuel being 2·4 lbs. of coal per horse power per hour. Of course he did not speak of the duty performed by these Cornish engines from his own knowledge, but he had every reason to believe the returns substantially correct.—The MEMBER said, he believed some doubts had been repeatedly thrown on the method of calculation.—Mr. FAIRBAIRN said, that some years ago he had been present at a discussion on the subject in the society of civil engineers, when great doubts were expressed, but further documents were brought forward to prove the accuracy of the calculations. However, taking the consumption of fuel by the Cornish engines to be 3 lb. per horse power per hour, that was a very great difference, as compared with our factory engines.

Mr. EATON HODGKINSON thought there had undoubtedly been great improvements made in the Cornish engines, chiefly the result of the adoption of the expansion of steam, which had not been used to any great extent in this neighbourhood, at least till very recently. Whether the returns were quite accurate or not, no one could doubt that the improvements were immense. He thought the plan of making the engine to lift the pump-rods only, and then the descent of the pump-rods lifting up the water, seemed to be a considerable improvement in adaptation. Again, whether Mr. Woolf's plan of the expansion of steam, or that of Mr. Watt, expanding it in the same cylinder, and cutting it off when at a distance of one-fourth or one-fifth down, were adopted (and it was a question as to which plan was the best) in both cases there was a great improvement upon former methods. These improvements had a strong bearing upon geology, for were it not for these engines, they could not investigate the strata in mines, for the water would drive them out or drown them. These engines, by draining lakes, might enable the geologist to obtain a great deal of information he must otherwise be without.

DISCOVERY IN ELECTRICITY.—A curious, and probably a most important, discovery in this branch of natural philosophy, was made about a fortnight since, in a boiler attached to a hauling engine, at Seghill, on the Cramlington Railway, near Newcastle. The engineman on attempting to lay hold of the lever of the safety valve, received what he describes as a severe blow, which nearly caused him to fall; he, a second time, attempted it, and received a similar blow. This having been made known, an examination of the boiler followed, and it was found that the steam which was escaping from a "blower" near to the safety valve, was highly charged with electricity. Our informant states that on himself placing one hand in the steam sparks upwards of half an inch length were emitted from the other, and this whilst he stood upon the masonry which was surrounding the boiler; so that had he been upon a glass stool the effects would have been much greater. We are glad to hear that this discovery is being followed up by experiments on other boilers; when the discovery was made, it was considered by many to be owing to the quality of the water used, which was pumped from the coal mine; subsequently, however, on trying the steam from a locomotive engine on the Newcastle and North Shields Railway, a great quantity of electricity was obtained, and the water used in this case was from the river Tyne. The subject is highly interesting, and we hope that the discovery may lead to useful results; the explosion of boilers has hitherto baffled research, and it is not improbable that electricity is intimately connected with.—*Durham Adv.*

COMPRESSED PEAT FUEL.—We have repeatedly referred to a machine, some time ago invented by Lord Willoughby d'Eresby, and lately perfected by skilful artisans under his direction, for compressing peats. One of his lordship's tenants, on the Drummond Castle estate, Mr. Clark, at Coryour, has of late been manufacturing the new fuel, chiefly for the jewellers and steel forgers in England; and this week a very large supply arrived at the new quay for shipment to London. It is made up in the shape and size of soap bars, and so powerful is the compression employed that the original peat is hardly to be recognised in the black and metallic looking mass which the machine perfects. The properties of this new fuel are found to be highly advantageous to the branches of manufactures above referred to, and its great economy is evidenced in the reduced price at which cutlery wrought with it is offered for sale. Sheffield razors, bearing the mark of "peat compressed," have been on sale this year throughout the country, we have been informed, as low as 1*l.* 7*s.* per dozen. Considering the great extent of peat-mosses in the Highland districts particularly, we look for a rapid extension of the use of this valuable invention of Lord Willoughby's, not only as offering the means of procuring for the inhabitants an abundant supply of a more cleanly and useful fuel than they have hitherto, from their inland situation, been able to obtain, but opening up to them a profitable branch of industry, for which the field is nearly as inexhaustible as that of the material.—*Perth Courier.*

ENGINEERING EXPEDITION.—The steamer-of-war *Polyphemus*, of 800 tons burthen, was launched at Chatham, on Monday, the 28th of September, and proceeded, on the following Thursday, to the engineering establishment of Messrs. Seawards and Capel, London, and they have completely equipped this fine vessel with engines of 200-horse power, with all her fittings, spare gear, implements and stores, and coal-boxes of wrought-iron to contain 200 tons of coals, in the space of twenty-two working days—being the shortest time upon record that a vessel of this magnitude has been fitted. She proceeded down by steam to Chatham, on Wednesday, the 21st ult., to take in her masts, being quite completed in her machinery. There were about 220 men employed by the Messrs. Seawards on the vessel.

LAW INTELLIGENCE.

ALLEGED INFORMALITY IN MAKING CALLS.

COURT OF QUEEN'S BENCH—NOVEMBER 2.

GREAT NORTH OF ENGLAND RAILWAY *v.* WEBB.—Mr. COWLING applied for a rule to show cause why the judgment in favour of the plaintiffs should not be arrested, or why the damages should not be reduced by the amount of the first call. The action was brought by the plaintiffs at the last assizes in Durham, to recover the amount of six calls—namely, 861*l.* odd—when a verdict was obtained against the defendant. On the one point of reduction of the damages, the learned counsel moved on the ground of the proceedings being informal and irregular. It appeared, that on the 19th of August, 1836, the directors entered into a resolution that a payment of 8*l.* per share should be called for, and to be made payable on the 6th of September. The Act of Parliament under which the company acted made the books of the company evidence in any court of justice; but it was provided that full particulars of the proceedings of the company should be set forth and detailed. In the present case, although the advertisement for the call on the 6th of September stated where and when the money was to be paid, yet no such information was contained in the resolution entered upon the books, as required by the Act of Parliament. On the second point, as to the arrest of the judgment, the learned counsel said the defendant was sued as a proprietor, when, in point of fact, he was no proprietor, but had simply signed a deed, in which he agreed to aid the railway undertaking to the amount of 5000*l.*, and consented to take fifty shares of 100*l.* each. Under such circumstances, the learned counsel submitted that the action should have been brought upon the deed, and that the defendant should have been sued as a subscriber, and not as a proprietor.—Rule to show cause granted on both points.

QUESTION OF RIGHT.

ROLLS' COURT—NOVEMBER 3.

MEYRICK *v.* WOODROFFE.—Mr. PEMBERTON, on behalf of Messrs. Brewer, applied for an injunction to restrain Mr. Woodroffe from prosecuting an action which he had brought in the Exchequer, or from instituting any other proceedings, to obtain payment of a sum of 874*l.* 16*s.* 11*d.* The plaintiffs in this suit, it appeared, were entitled in reversion to some estates in Wales, consisting of mines, of which a lease had been granted to Mr. Woodroffe, who, for the convenience of working, erected engines and other machinery, and laid down tramroads. Mr. Woodroffe, being greatly in arrear with his rent, in 1834 sold his interest in the mines to Messrs. Brewer, who were also made parties to this suit. They, at the same time, purchased of Mr. Woodroffe certain parts of the machinery for the sum of 874*l.* 16*s.* 11*d.*, which, on the part of the plaintiffs, it was contended were attached to the freehold. These he was proceeding to take down, in consequence of which this bill was immediately filed both against Mr. Woodroffe and Messrs. Brewer, and an injunction was obtained restraining them from taking down or removing any portion of the property which had been sold or detached. In 1836 the cause came on for hearing, and a reference was directed to the Master, to take an account of the rent due to the plaintiffs. The reference was still pending before the Master, notwithstanding which Mr. Woodroffe brought an action for the amount of the purchase. This action it was now sought to restrain until the rights of all parties could be determined by the court.—Lord LANGDALE granted the injunction.

LONDON AND GREENWICH RAILWAY COMPANY.

BAIL COURT—NOVEMBER 4.

THE QUEEN *v.* THE COMPANY.—Mr. WALLINGER applied to the court for a writ of *certiorari* to remove into this court an indictment that had been preferred against the London and Greenwich Railway Company, at the sessions for the borough of Southwark, and which charged the defendants with having erected certain arches of the railroad over a certain public footpath. The question would arise on the trial whether the defendants had not a right to erect the said arches, and which would depend entirely upon the proper construction of the company's Act of Parliament.—Mr. Justice PATTESON granted the application.

QUESTION OF LEGAL TRANSFER OF SHARES.

COURT OF QUEEN'S BENCH—NOV. 4.

BOSANQUET *v.* BOLTON.—This was an action against the defendant as one of the directors of the Leamington Bank, to recover money due on account of that bank. The defence was, that the defendant had ceased to be director and proprietor some months before the debt was incurred. The question on this defence was, whether the defendant's shares had been properly transferred from his name. The deed of incorporation declared that no shares should be transferred without the consent of the directors, attested by the signature of the chairman of that body, or, in the event of his absence, by the signature of the deputy-chairman. The defendant had been chairman of the board of directors. His proposal had been regularly submitted to the board of directors at a moment when the defendant was in the chair, and when the deputy-chairman was also present. The directors unanimously voted that the proposed transfer should be permitted, and the defendant signed the transfer. It was contended that as he had only once signed the document the transfer was not complete, for his single signature must be taken to be that of the shareholder, in which case there was no signature of the chairman; or it must be taken to be the signature of the chairman, and then there was no signature of the shareholder, and so no property would pass. The cause was tried at the last assizes for Warwick, before Lord Chief Justice Tindal, and a verdict was given for the plaintiff.

Mr. Serjeant GOULBURN now moved, by leave of the learned Chief Justice, to set aside this verdict, and enter a verdict for the defendant, on the ground that the transfer was quite sufficient, and that the defendant was not now, after the lapse of many months, to be held liable for the debts of a company of which he had long ceased to be a member.—The COURT granted the rule.

EASTERN COUNTIES RAILWAY SHARES.

COURT OF COMMON PLEAS—NOV. 4.

BAIRD *v.* ROBERTSON.—This was an action to compel the defendant, the secretary to the Eastern Counties Railway, to pay back to the plaintiff the sum of 400*l.*, deposited by the latter in his hands to complete the purchase of 200 shares in the company; but to be returned to the plaintiff if he failed to establish his claim to the shares. The verdict was for the plaintiff.

Mr. Serjeant TALFOURD now moved for a rule for a nonsuit, on the ground that the defendant, as the servant of the company, held the money in trust for them, and had no power to surrender it, and that the plaintiff having deposited the money to be applied according to a specified contingency, could not demand it back, without having on his part done something to bring about the event, upon which the return of the money was made contingent.

The COURT ruled that the plaintiff had a right to forego his claim to shares whenever he pleased, and in doing so to demand back his money.—Rule refused.

BIRMINGHAM AND GLOUCESTER RAILWAY.

BAIL COURT—NOV. 5.

THE QUEEN *v.* THE COMPANY.—Mr. SELF applied to the Court for an enlargement of the time for making the return to the writ of *mandamus* which had been issued in this case, and which was returnable upon the first day of the present term. The learned counsel stated that Sir William Follett had been the legal adviser of the defendants throughout the proceedings, and that a case had been laid before him upon the subject of the return which was to be made to the writ. Sir W. Follett was, however, at present absent in France, where he was delayed by the illness of some part of his family. He was, however, expected very shortly, and the application was only for an additional period of ten days. No application had been made for a peremptory *mandamus*, nor any for an attachment.—On these circumstances the application was granted.

THE ZOUCH MINERAL PROPERTY—ACTION OF TRESPASS.

COURT OF COMMON PLEAS—NOV. 5.

WOOD *v.* MORRWOOD.—This was an action of trespass, and was tried at the last assizes for Derby, before Lord Chief Justice Tindal, when a verdict was given for the plaintiff. It appeared that in the reign of Henry VIII. a settlement was made of a large property in the county of Derby, called the Zouch property, the surface of the soil being settled to certain uses, whilst the beds of coal under the surface, except such parts as lay under ancient buildings, were settled to other uses. The latter became, in the course of time, duly vested in the family of the defendant; and a large portion of the land in the plaintiff. A few years ago the defendant, in working the beds of coal, having approached some ancient buildings on the land of the plaintiff, a communication took place between them, and the defendant was allowed to remove the coal under the buildings, on paying to the plaintiff a certain sum as the value thereof. In 1838, however, the plaintiff put in a claim to the mineral under his land, and having brought an action of trespass against the defendant, obtained a verdict. Previous to the trial a bill had been filed by the defendant charging that the plaintiff had in his possession certain deeds which would manifest the state of the property at the time of the settlement, but the plaintiff in his answer denied having any such deeds in his possession. On the trial, however, a deed was produced purporting to be a conveyance prior to the settlement, by which the plaintiff became entitled to the mineral under the surface, and the defendant thereupon gave up his defence, and a verdict was returned for the plaintiff. But since the trial it had been ascertained that the conveyance put in by the plaintiff was made by a person incompetent to convey the property.

The SOLICITOR-GENERAL now moved, on the ground of surprise, for a rule to show cause why the verdict should not be set aside, and a new trial had.—Rule granted.

NEW PATENTS FOR OCTOBER.

William Henry Fox Talbot, Esq., Lacock Abbey, Wilts, for improvements in producing or obtaining motive power.

James Stirling, engineer, Dundee, and Robert Stirling, doctor in divinity, Galston, Ayrshire, for certain improvements in air engines.

James Fitt, sen., manufacturer, Wilmer-gardens, Hoxton Old Town, for a novel construction of machinery for communicating mechanical power.

Thomas Spencer, carver and gilder, Liverpool, and John Wilson, lecturer on chemistry, of the same place, for certain improvements in the process of engraving on metals by means of voltaic electricity.

Thomas Wood, the younger, gentleman, Wandsworth-road, Clapham, for improvements in paving streets, roads, bridges, squares, paths, and such like ways.

Robert Pettit, gentleman, Woodhouse-place, Stepney-green, for improvements in railroads, and in the carriages and wheels employed thereon.

William Newton, civil engineer, Chancery lane, for an invention of certain improvements in engines to be worked by air, or other gases.

James Hancock, civil engineer, Sidney-square, Mile-end, for an improved method of raising water and other fluids.

Henry Pinkus, Esq., Panton-square, Middlesex, for an improved method of combining and applying materials applicable to the formation or construction of roads or ways.

SPECIFICATIONS OF RECENT PATENTS.

[From the "Inventors' Advocate."]

Elijah Galloway, engineer, Manchester-street, Gray's-inn-road, improvements in steam-engines, which improvements are also applicable to engines for raising and forcing fluids, Oct. 22.—This specification is too complicated to give a clear description of these improvements without the aid of drawings, we shall, therefore, simply give the claims, with a short description of some of the working parts.

Claim first.—Mode of constructing the working parts of rotary engines, that they may be kept steam-tight by pressure.

Claim second.—The form, construction, and method of suspending the abutment cylinder that it may revolve with the piston, and be kept in contact with the other cylinders by its own gravity.

Claim third.—The construction of the piston.

Claim fourth.—The steam-tight casing, with its covers.

Claim fifth.—The construction of the interior ends of the cylinders.

These improvements are confined to rotary engines, and the one described in this specification may be termed a double engine. There is a steam-tight casing, which is fixed firmly to frame work, and through which there is an aperture for the main axle. Two cylinders, a large and a smaller one, are firmly screwed together by means of flanges, and the inner one keyed on one end of the shaft. The piston is formed with projections or ribs on its side, and fits accurately, and is fixed firmly between the two cylinders, so as to form a partition—the ends of these cylinders being turned out to quite a flat surface. On the other end of the shaft is a precisely similar arrangement of cylinders with a piston, only instead of their being keyed to the shaft, they are fixed thereto by feathers, which allow them, as they rotate with the shaft, alternately to approach and recede from the middle; in connection with these two sets of cylinders, and acting on both, is the abutment cylinder; this is cast in one piece, and has the form of a double cylinder, open at both ends, and joined in the middle, where there are two flat surfaces, with slits in the centre, made to prevent any friction on the main shaft in its working; during which it is acted upon by pressure from two rollers, placed at the side of the casing for that purpose; by these rollers, and with its own gravity, it is kept with its exterior cylindrical surface in contact with the interior surface of the larger cylinders, and with its interior cylindrical surface in contact with the top part of the outer cylindrical surface of the smaller cylinders. The steam is conveyed from the interior to a condenser, or into the air (as the engine may be working), by a pipe, and it is by immersing this pipe in the water or fluid to be raised, that that object is effected by this apparatus. The inventor lays no claim to any of the separate parts of the machinery, but to the combination as producing these effects; and observes that the greatest nicety is required in the manufacture of the working parts to render them steam-tight without using packing material of any kind, when by these improvements they will continue so, being by their arrangement entirely unaffected by the unavoidable wear and tear to which engines are subjected.

AMERICAN PATENTS.

[From the "Journal of the Franklin Institute."]

For separating uncorroded from corroded lead; Edward Clark, Saugerties, Ulster county, New York.

In manufacturing white lead, it becomes necessary to separate the particles of uncorroded lead from that which has been converted into white lead, and this has been found to be a difficult and injurious operation when performed by the means hitherto essayed. The apparatus and process employed by the patentee consist in passing the partially corroded lead on an endless wire or canvas cloth apron, under a whipper, the quick and violent operation of which upon it, separates the carbonate of lead from the metallic lead. The whipper consists of a frame covered with wire cloth, or in some similar manner; this frame is jointed at one end to the frame of the endless apron, and it is worked up and down by cams and springs, so as to operate upon the lead as it passes along on the endless apron. The entire machine is inclosed, to confine the dust, and prevent its deleterious effects. The claim is to "the separation of the corroded parts of the lead from the metal, during the process of manufacturing white lead, by means of the apparatus described, consisting of the endless cloth in combination with the spring whipper."

For supplying locomotives with water; Stephen Vail, Morristown, New Jersey.

The following extract from the specification, in which the references to the drawings are, of course, omitted, will furnish a clear idea of the nature of the invention:—"My invention is intended to dispense with the reservoir now used at those stations where locomotive engines are to take in their supply of water, into which the water has, usually, to be pumped by hand, at great labour, and in which, in cold weather, its temperature is frequently reduced considerably below that of ordinary well water. This object I accomplish by applying the power of the locomotive engine to work a pump, or pumps, raising water from a common well, and supplying the tank therewith, by merely driving the locomotive on to the lateral track, where it is to receive its supply of water, and allowing its driving wheels to rest on two friction wheels affixed to a line shaft, situated in a pit, prepared for that purpose below the track—the peripheries of said friction wheels extending up to the line of the rails, and passing through openings therein, prepared for that purpose. I move the locomotive by means of chains, or other suitable contrivances, so that it shall stand steadily with the peripheries of its driving wheels resting on the above-named friction wheels, which, when the steam-engine is started, will necessarily drive the friction wheels, the shaft of which has attached to it the apparatus requisite for working the pump, or pumps.

"Having thus fully described the nature and object of my invention, and shown the manner in which the same may be carried into operation, what I claim therein, and desire to secure by letters patent, is the within-described mode of working pumps for raising water from wells for the supply of locomotive engines, and which mode of communicating power may also be applied to other useful purposes; that is to say, I claim the placing of friction wheels upon a shaft, below the track of a railroad, in such manner as that the driving wheels of a locomotive engine may be made to rest upon their peripheries, and when set in action by the steam-engine, will give motion to said friction wheels, and, consequently, to the machinery attached thereto, substantially in the manner, and for the purpose, set forth."

For supplying steam to aid combustion in steam-engine furnaces; John B. Pettival, civil engineer, Charleston, South Carolina.

"Under the fire, or grate, bars of the furnace, to which my improvement is to be applied, I affix or suspend the apparatus which I have devised for the purpose of giving a supply of steam to the fire, this apparatus being applied without its being necessary to make any alteration in the ordinary fire-bars, or in any other part of the furnace. In its form my apparatus bears a resemblance to the grate of the furnace, being composed of bars, which may be so arranged, as, when in place, to be situated immediately under those of the furnace, and thus present no obstruction to the falling of the ashes from the fire. These bars are hollow, having each a perforation, or channel, for the passage of steam, from end to end; from these channels there are numerous small lateral passages for the escape of steam under the fire-bars of the furnace. These perforated bars are connected at each end by cross-bars, and their perforations open at each end into a channel, or tube, formed in these cross-bars, for the purpose of establishing a free passage of steam through the system."

The claim is to "the making and using of a grate-formed apparatus, consisting of hollow bars, furnished with lateral openings for the emission of steam; said apparatus to be placed below the ordinary fire-bars in the ash-pit of a furnace, for the purpose described, and its general construction and adaptation being such as is herein set forth."

There is also a claim to "the particular manner of constructing said apparatus, by casting it in two separate portions, which, when placed one upon the other, and properly confined together, will leave the necessary channels for the conveyance and emission of steam."

For constructing railroads; James Stimpson, Baltimore, Maryland.

"The nature of my invention consists, for the superstructure of railroads, in first placing heavy square, or other shaped, timber-string pieces, or logs, hewed, or slabbed by saws, on two sides at least; that is, the cap should

removed from the top and bottom as laid in the earth, and these string pieces are to serve as the foundation of the road, and are to be laid in two continuous and parallel rows, about eighteen inches below the surface of the earth, for the support of cast-iron chairs. The chairs are to be fastened on the top of the string pieces, and the longitudinal iron track rails are to be secured in the openings in the tops of the chairs. These chairs are formed with two upright standards resting on the middle, laterally, of each string piece, about the width of the track apart, and eighteen inches high, and connected by two trusses, ranging from one to the other."

Instructions are given for laying the string pieces where there are embankments, and a so where there are excavations or deep cuts. In all cases the wood upon which the chairs are fastened, is to be sunk deep in the ground, where it is estimated that the timbers will not decay in less than from fifty to a hundred years.

The claim is to "the combination of the wooden foundation string pieces immersed in the earth, with the iron chairs and track rails, in contact with zinc, or without zinc, as set forth."

PROCEEDINGS OF PUBLIC COMPANIES.

REDMOOR CONSOLIDATED MINING COMPANY.

A special general meeting of the shareholders of this company was held at the offices, Finsbury-square, on Wednesday, the 4th instant, pursuant to advertisement, for the purpose of taking into consideration the resolution passed at the last meeting, and of hearing the opinion which had been taken of counsel thereon.

EDWARD CLIFFORD, Esq., in the chair.

The advertisement convening the meeting, together with the captain's report (which will be found under the head of "Mining Correspondence"), were then read.

E. H. PLUMPTRE, Esq. (the solicitor of the company), said, that on the resolution being proposed at the last meeting, an objection had been taken, and he had, therefore, taken the opinion of two counsel—one of the bar of equity, and one of common law—and their opinion was, that the resolution could not be confirmed.

It was then moved by Mr. GROUT, and seconded by Mr. MURRAY—"That the resolution therein referred to be not confirmed"—which was carried unanimously.

The MANAGERS (Messrs. Clifford, Murray, and Stainsby) then submitted another plan for raising the further capital, by proposing that 2*l.* per share be added to the several shares—making them 7*l.* instead of 5*l.* shares—and that they should be at liberty, at any time, and by such instalments as they should think necessary, to make a call of 1*l.*, but the remaining 1*l.* should not be called for without a meeting of the shareholders being made for the express purpose—that the payment of the increased capital shall be subject to the same liability of forfeiture and regulations as the holders of the 5*l.* original shares—that the increased capital, or so much as shall be paid up, shall be repaid to the holders of the certificates, with interest thereon, at the rate of 5 per cent. per annum, with a bonus of 50 per cent., before any division of profit shall be made to the shareholders of the original capital of 5*l.*—that in the event of the company being dissolved, the repayment of such additional capital, and the interest and bonus thereon, shall take preference of any dividend made in respect of the original 5*l.* shares—that the managers shall be authorised to issue new shares, printed in red ink, to those advancing the new capital—and at foot of which these resolutions shall be printed.

The following resolution was moved by Mr. GROUT, seconded by Mr. HALL, and carried unanimously—"That the present meeting recommend such proposal of the managers as to the mode of raising further capital, and that the managers call the necessary meetings for giving effect to the same."

Mr. SHORE put a question to Mr. Hills, whether the directors had made up their minds to renew the working of a shaft that had been some time ago suspended?—Mr. STAINSBY replied, that the reason it had been suspended was, that the engine was at such a distance from the shaft, which rendered it very expensive, and that the capital of the company, at the time, was not sufficient to purchase a new engine; but that the opinion of the shareholders was still the same as heretofore as to the qualities of that portion of the mine, and, did they become prosperous, it could soon be again worked.

It was then moved by Mr. GROUT, and seconded by Mr. HALL—"That this meeting cannot separate without expressing confidence in the managers, and recording their thanks to the chairman and managers for their unremitting attention to the affairs of the company."

The meeting then adjourned to Wednesday next, the 11th instant.

BRISTOL AND EXETER RAILWAY COMPANY.

A special general meeting of this company was held on Thursday week, at Bristol, to determine on the appropriation of the forfeited shares.

JAMES GIBBS, Esq., in the chair.

The CHAIRMAN having briefly explained the nature of the business to be brought before the meeting—Mr. GUTCH rose to propose the first resolution, observing, that from the attention which he had paid to the past proceedings of the company, he confidently hoped that they would now go forward as one united, and, he trusted, successful body.—The resolution (which, with the others adopted, will be found in our advertising columns of last week) was then put to the meeting, and passed unanimously.

Mr. CARLISLE, in referring to the late meeting of the company, on the subject of the lease, said, that a statement had been circulated that it was the determination of the directors not to continue to pay 4 per cent. dividend. As one of the directors at the time when this was discussed, he remembered that it was then strongly urged, as an argument to small shareholders, who could not live upon air, that this dividend should be fixed. He had given the most direct contradiction to the statement, and he now alluded to it only in order that it might receive the same contradiction publicly from the chairman.

The CHAIRMAN said, there was not the slightest intention on the part of the directors to alter the rate of interest, unless the shareholders should order otherwise.—Mr. CARLISLE observed, that it had also been asserted that the new shares would not receive the same rate of interest as the others; and this he had not less boldly contradicted as absurd. On the new shares, to be paid for at 20*l.* by original shareholders, the interest would be at the rate of 12 per cent.—The CHAIRMAN had the satisfaction of stating that the next resolution would meet the question of Mr. Carlisle.

The second resolution, moved by Mr. BROWN (of Manchester), and seconded by Mr. T. W. HILL, was then put to the meeting, and unanimously adopted.

A conversation here ensued, in reference to the appropriation of 151 residuary shares, for which numerous applications had been already sent in; but the division could not take place until the 10th January, as the original shareholders had till that time to pay up the calls.

In reply to a question as to the necessity for future calls, Mr. C. B. FRIPP said, that they had now reached the point at which they could borrow. There was little doubt that money would come in rapidly, especially on the security the company could offer, backed as it was by the lease of the Great Western Company; and if so, there would be but little occasion for calls. The directors certainly would not make calls if it was not necessary; at the same time, it was not the interest of the proprietary to let the work stand still.—Thanks were then voted to the chairman and directors, and the meeting separated.

DURHAM AND SUNDERLAND RAILWAY.

An adjourned meeting of the shareholders in this company was held in Sunderland, on Tuesday, the 27th ult.

CALEB WILSON, Esq., in the chair.

A report on the state and prospects of the railway, prepared by the special committee appointed at the last meeting, was read.

REPORT.

The report stated that the total cost of the formation of the railway, for the whole of this 21 miles 1 quarter 167 yards, including the Act of Parliament and law business, has not exceeded 130,175*l.* 17*s.* 7*d.*, being about 5000*l.* per mile, which, according to the information we have received, scarcely exceeds one-third of the cost of any other railway. The company have also expended 107,848*l.* 7*s.* 1*d.* for stations, shipping places, engines, engine houses, carriages, waggons, purchasing property, the general stock in trade, money paid for rents, interest, discounts, and salaries, to the present time, and finishing the railway to Hougball Colliery—making the sum total of expenditure in this undertaking 237,023*l.* 4*s.* 8*d.*; in which sum is 78,014*l.* 19*s.* 6½*d.*, the value of property in quays, houses, buildings, and stock in trade, exclusive of the railroad; so that, in estimating the value of a share in this company, regard should be had to its proportion of this property, which, on an equal division, would be 20*l.* 6*s.* 5½*d.* per share, as well as its proportion of the general property in the railroad, which, after deducting this 78,014*l.* 19*s.* 6½*d.*, has cost 174,747*l.* 5*s.*, leaving, on an equal division, 45*l.* 19*s.* 4*d.* per share—making the total value of each share, estimating the same at the aggregate amount expended, to be 65*l.* 19*s.* 7½*d.* With respect to the actual revenue, we find that the receipts of last month are 2951*l.* 9*s.*, being at the rate of 35,417*l.* 15*s.* per annum; and if we add to this sum the 2000*l.* and 2955*l.* 4*s.*, to arise from a contemplated arrangement with the land owners and coal owners, they give a total annual revenue of 40,355*l.* 19*s.* This large sum, the committee are confident, must very soon be much augmented by the increase of coals from Shincliffe and Hougball Collieries; and as Shincliffe Colliery is just coming into full operation, and it appears certain will send next year for shipment at least 20,000 chaldrons beyond its present vend, and as Hougball Colliery will ere long be "won," it is not too sanguine to anticipate that even during the ensuing year the revenue will be advanced to 45,355*l.* 19*s.*, with every chance of gradual and continued progression. Reckoning on the other side of the account, the expenses of working the line, including the way leave rents and every other charge at about 28,000*l.*, the actual cost of last year, it shows at once a net profit for the ensuing year of 17,355*l.* 19*s.*

Upon the best mode of discharging the floating debt, the committee confess extreme anxiety, because to the pecuniary difficulties in which they are involved they trace the depression in the shares, and the want of public confidence. "The debt (the report states) is 84,855*l.* 16*s.* 4*d.*, but from which should be deducted a debt of 9355*l.*, owing to the Haswell company, which has not to be provided for in cash, but gradually liquidated in the course of a long term of years, by periodical deductions from the loading of coals, leaving a balance of 74,645*l.* 16*s.* 4*d.*, a very great portion of which consists of running acceptances, liable to enormous and constantly increasing expenses of discount and renewal, and a large bank balance, subject to a charge of the usual banker's commission, besides interest, all of which has, for a length of time, pressed with extreme severity upon the finances of the company. After deliberating upon many plans, the only expedient seems to be, an advance by the shareholders of 15*l.* per share as a loan, at 7½ per cent. interest, to be paid in preference to all dividends, which, on the 2301 original and new shares actually sold, will (even allowing off 955*l.* for the default of those who may be unable or unwilling to pay their proportion) raise 40,000*l.*, which, with 14,220*l.*, to be procured by unissued bonds, which the directors are empowered to grant by Act of Parliament; and with 16,170*l.*, to be produced by the sale of 539 new shares remaining undisposed of, calculating them at the low price of 30*l.* per share, will make a total of 70,390*l.*—a sum nearly adequate wholly to discharge the debt, or at least to reduce it to such an amount as may be met by gradual abstractions from the current revenue. We have little doubt these sums of 14,220*l.* and 16,170*l.* will be readily realised, for, as to the former, a suggestion has been made by Mr. Bramwell, which appears to remove all difficulty; and the new shares, we conceive, from the improved position consequent upon the proposed arrangements, will speedily sell even at a much higher rate than that we have placed upon them. We have not taken into calculation 1468*l.* 7*s.* 2*d.* arrears of calls, nor 2922*l.* 4*s.* 9½*d.*, the debt at present due from the coal owners, because these sums, with the revenue to the end of next month, will be required to pay up all arrears of rents that will be then due to the landowners.

Mr. WM. BELL objected to the measures proposed in this report, and read, for the consideration of the meeting, a plan which he himself had drawn up. Some discussion followed, which ended by a resolution, unanimously carried, that the report of the special committee be adopted; and that the report, together with the plan proposed by Mr. Bell, be printed and circulated among the shareholders, in order that they might have an opportunity of investigating into the merits of each.—The thanks of the proprietors were voted to the chairman, Messrs. Jonapohn and Wright (for compiling the report), and the meeting adjourned to Tuesday next, the 10th inst.

NORTH MIDLAND RAILWAY.

A meeting of the shareholders in this railway was held at the office of the company, Derby, on Friday, the 23d ult., for the purpose of taking into consideration a provisional agreement entered into between the directors of the Leeds and Selby and the directors of the York and North Midland, by which it was proposed that the latter should take a lease of the Leeds and Selby line, for a term of thirty-one years, at a rent of 17,000*l.* per annum. It may be proper to state, that although this agreement was made between the Leeds and Selby and the York and North Midland, a private arrangement was entered into with them by the directors of the North Midland, to take half the lease, and it was for the purpose of confirming that arrangement that the above meeting was held.

G. C. GLYN, Esq. (chairman of the London directors), in the chair.

The attendance of shareholders was extremely numerous.—After much discussion, the meeting was unanimously of opinion, that it would be for the benefit of the company to sanction the agreement, which was accordingly done. The consent of the three companies being now given, nothing is wanted to give the agreement validity but the sanction of Parliament, which will be asked in the ensuing session. The alteration in the traffic is expected to take place in a week or two, but, of course, due notice will be given of the time.

WALSALL AND SOUTH STAFFORDSHIRE BANK.

It will be recollected that at the annual general meeting of the shareholders of this establishment, in August last, some of the directors' statements being contradicted by Mr. T. F. Wood (the late manager), auditors were appointed to investigate generally into the affairs of the bank, and report thereupon at an adjourned meeting, to be held on the first Monday in November. This meeting took place at the George Hotel, Wolverhampton, on Monday last, and was attended by a large and highly respectable body of the shareholders.

Mr. JOHN JAMES in the chair.

Mr. Holden and Mr. Day (the auditors) having presented their report, which was very short, Mr. JOSIAH POTTER (the present manager) read it to the meeting. It stated that the auditors considered the directors fully borne out by the investigation of the business transacted up to August last; a large proportion of the declared jeopardised guarantee fund having since that time been ascertained to be bad, and the remainder absorbed by debts of a decidedly doubtful character. A long letter was read from Mr. T. F. Wood, explaining that he was indured to address it to the chairman in consequence of not being able to attend the meeting, and expressing his positive conviction that not more than one-half of the assumed deficit would be found to exist. Mr. Wood at the same time pledged himself not to rest until he had proved his statement correct, and attempted to throw considerable blame on the ditors.—PETER POTTER, Esq., was about to address the meeting on behalf of himself and the other directors, in reply to Mr. Wood's letter, but it was thought altogether unnecessary by the shareholders present. It was, however, deemed advisable, on passing a vote of thanks to the auditors, to continue the powers of those gentlemen, in order to give the late manager an opportunity of giving his assistance in the recovery of any of the presumed bad or doubtful debts incurred under his management, with power to those gentlemen to report the result to a meeting of the shareholders, whenever they might deem it expedient.—The auditors' report having been unanimously adopted, with thanks to them for their labours on behalf of the company—the appointment of the auditors continued for the before-mentioned purpose—and thanks having been voted to the chairman, the meeting was dissolved.

CITY OF DUBLIN STEAM PACKET COMPANY.

The half-yearly meeting of this company was held in the board-room, Eden-quay, Dublin, on Saturday last, when a dividend at the rate of 6 per cent. per annum, or 3 per cent. for the half year, was declared. In the report made by the directors, there were some calculations announced, which must be very satisfactory to every one that is interested in this kind of property. Since steam navigation was first introduced into Ireland, the total loss sustained in the aggregate on capital so employed (which at present amounts to six millions and a half) has been but 13*s.* 4*d.* per cent. per annum; whereas, if the same property was insured at the usual rates, from 6*l.* to 7*l.* for the same time, the proprietors of steam property must have lost considerably, did each company not become its own insurers, or, in other words, to run the risk of loss themselves. Also, the most disastrous year (1833) to steam property the loss did not exceed in the aggregate 1*l.* 10*s.* per cent. on the year. The result of these calculations is, that a marine assurance company will, we are given to understand, be established in London to insure steam vessels generally, which will reduce the present rates paid (from 6*l.* to 7*l.*) to about 2*l.* sterling per annum.

YORK AND SCARBOROUGH RAILWAY.—At a very numerous meeting, held in the Town Hall, Scarborough, to consider the subject of establishing a railway communication from that place to York, the formation of the line was unanimously agreed to—the terminus to be fixed at Falsgrave, near the junction of the Seamer road with the York turnpike-road; hereafter, if it were thought desirable, the railway might be continued so as to form a junction with the harbour. Mr. Stephenson has since been over the whole of the line, and it has exceeded the expectations he had previously formed. The country is such that for almost the whole of the way the line will run nearly on the surface. There will, consequently, be very little cutting or embanking, and as there are a remarkably small number of roads to cross, there will be few bridges.

DEVON AND CORNWALL RAILWAY.—The committee of this projected undertaking held their meeting in the Council-room, Truro, on Wednesday last, to devise the best method for carrying into effect the arrangement laid down at the county meeting for obtaining subscriptions to the amount of 200*l.*, to accomplish the necessary survey. It was resolved to request persons in the different districts of the county to interest themselves in accomplishing this matter, and that all sums of 5*l.* and above should be considered as an investment on any subsequent prosecution of this undertaking. A sub-committee, consisting of Messrs. J. E. Vivian, J. T. Treffry, John Paynter, W. Reynolds, A. Fox, H. Willyams, William M. Tweedy (treasurer), and W. H. Bond (secretary), was appointed to carry the resolution into effect, and the following very liberal subscriptions were entered into at once:—Lords Falmouth and Boscawen, 100*l.*; Sir R. Hussey Vivian, Bart., 100*l.*; Sir Charles Lemon, Bart., 50*l.*; Mr. Pendarves, 50*l.*; Messrs. Tweedy, Williams and Co., Cornish Bank, 50*l.*; Mr. Basset, 25*l.*; Mr. Treffry, 25*l.*; Mr. Paynter (Boskenna), 25*l.*; Mr. H. Willyams, 25*l.*; Mr. Reynolds, 25*l.*; and other sums, amounting in all to 635*l.* Such a commencement augurs well for the future success of this great undertaking.—*West Briton.*

THE IRON MANUFACTURES OF ENGLAND AND FRANCE.

The following notice of the iron manufactures of England and France is by M. Michael Chevalier. It forms the introduction to a review of a work recently published in Paris, on practical metallurgy.

It has been justly observed, that the degree of civilisation attained by any nation may be ascertained by the quantity of iron it consumes. If this is the case, France, since the year 1830, must have made very considerable progress in civilisation, for since that time her consumption of forged iron, which remained nearly stationary at 150,000 tons (of 1000 kilogrammes), has continued regularly to increase. In 1838 there were 224,000 tons of forged iron manufactured. The production of cast-iron was 348,000 tons, reckoning that which is employed as cast-iron, and that which is refined, that is, converted into malleable-iron, which during this change is subject to very considerable waste.

It is difficult to anticipate any limits to this progress. Iron, in proportion as man becomes better acquainted with the method of working it, is appropriated to other purposes, and replaces other materials, that are become more scarce, such as wood. In our time it is adopted as a material for building both houses and ships.

Malleable iron was formerly extracted directly from the ore. During the last six or seven centuries it has undergone an intermediate process. Cast-iron, which, as the name indicates, is fusible, is consequently adapted to many purposes that iron, commonly so called, would not admit of. Cast-iron, when it is intended to be converted into forged-iron, goes through the operation of being refined. Till the commencement of this century cast-iron was refined in small furnaces called refining furnaces, of which a blacksmith's forge is a good representation on a small scale.

Necessity is a powerful instructress. It is she who induced the English to substitute coal for charcoal. About a century ago their forests were exhausted. Meanwhile the progress of their manufactures imperiously urged them to continue making iron, which supplies other branches of production with the first materials for their tools and machines. This was about the year 1740. Resuming the experiments attempted by Lord Dudley, at the beginning of the 17th century, the masters of the English forges projected using in their blast-furnaces the coal furnished by the inexhaustible mines of their country, after submitting it to a process which converted it into coke. More recently coal has been used in the same way for refining cast iron, without being made into coke. The ordinary charcoal fire, which was confined in a square hearth, and excited by a powerful blast of air from a pair of bellows, was replaced by a reverberatory furnace, in which the coal was placed on a grate, and the blast produced by the draught of a high chimney. The process of refining was then called puddling.

The ingenuity of the English does not stop here. In order to form the tempered iron into regular bars, they gave up the use of small hammers, and substituted cylinders put into rapid motion, which seized between their revolving surfaces the masses of red-hot iron, squeezing them like soft wax; and flattening and shaping them in the course of a few minutes into bars of all sizes. By means of these improvements the manufacture of iron in Great Britain has been, and will continue to be, an inconceivable resource of national wealth. In 1740 all the English blast-furnaces together only produced 17,000 tons of cast-iron.

In 1788 the production was	68,000	tons.
1796	125,000	"
1806	250,000	"
1820	400,000	"
1828	700,000	"
At the present time it is	1,000,000	"

At the same time, thanks to the general progress of British industry, and particularly to the orders for rails for the railroads in England and America, the manufacture of iron has been of late years extraordinarily rapid; it will continue to make further improvements. The principal of which will be, firstly, to employ a blast of hot air, instead of cold, in the blast-furnaces; secondly, in certain cases to employ coal as it comes from the pits, without being converted into coke, and to render available the calorific power of the gas which escapes during the carbonisation. Thirdly, to employ in blast-furnaces a kind of coal not hitherto used for this purpose. This coal is called anthracite. It was unsuccessfully attempted to be employed in the manufacture of iron a dozen years ago. For this last improvement, iron founders are indebted to Mr. Crane.

The English manufacture became generally adopted by us after many attempts, and many failures, after the ruin of numerous speculators, who, one after another, threw their capital into the crucibles of their blast-furnaces, as into a fathomless gulf.

France at length possesses immense establishments like those of England; at the head of which we may mention Decazeville, which has at last completed its long and persevering experiments; Alais and Creuzot, which have been saved from ruin by experienced hands; and, above all, Fourchambault, which escaped the ruin to which other similar establishments were a prey, owing to the ability of the late M. Louis Boignis.

The English system, when first introduced into France, was received with a kind of enthusiasm. It appeared as though the only chance of succeeding in the manufacture of iron was to rush blindly into the method adopted in Great Britain.

It was determined at all risks that coal should be used in the manufacture. Wood was considered unworthy to be put into competition with it. In the course of time they began to understand that France was less richly gifted with coal mines than England, that if the English had ceased to employ wood it was because their forests had been exhausted in clearing the ground, while the French soil is intersected by chains of mountains where nothing but wood will grow. It was said, that after all, forests had the advantage of being more inexhaustible than mines—that our iron ores are superior to those of England—that they were much cheaper—and that, consequently, our iron-works would be enabled to bear an extra expense in the fuel employed, wood being necessarily more expensive than coal, which is found in thick beds under our feet. Viewing the subject in this light, the iron masters of France who use wood, secure with respect to the future, have shaken off their apathy, and have set out on a plan of their own in pursuit of improvement. Reserving charcoal for smelting the iron, they have done the refining part with coal, by means of the English operation of puddling in a reverberating furnace, but in order to form the iron into bars, they make use of their old plan of hammering, instead of resorting to cylinders, which would have been very expensive. They afterwards endeavoured by additional contrivances to make use of all the caloric which is given out by the combustion of the wood.

During the process of carbonisation, wood loses at least four-fifths of its weight. Thus, of 100 parts, eighty of them are wasted without any advantage before the fuel is ready for the furnace. It has then been asked if it would be impossible to make use of those combustible elements which are entirely wasted? There has been an attempt made to fill the blast-furnaces with green wood, then with dry wood, and at last with charred or half carbonised wood, called red charcoal. A considerable number of the masters of forges have distinguished themselves by these attempts.

This is not all; once in pursuit of economy they imagined they might be able to turn to advantage the flame which issues from the chimneys of the blast-furnaces, and this they have appropriated to two purposes—the one to heat the air which is afterwards used for the blast of the furnaces; the other, still more important, to give motion to the machinery of the forges, that is, the blowing machines and the hammers. Heat, in fact, since the invention of steam-engines, is nothing but power. Considering as such their success has been complete.

At the last exhibition of the products of industry, Messrs Thomas, Laurens, and Dufournel, and also M. Eugene Flachat, obtained a silver medal for having fitted up in a great many manufactories an apparatus, by means of which the flame which escapes from the blast furnaces, from refining furnaces, and reverberatory furnaces, is applied as a means of working the bellows, rollers, and the hammers.

In this double innovation, of the substitution of wood for charcoal, and in the appropriation of the heat that escapes, there is the germ of a revolution in metallurgy. It enables France to obtain more iron with the same quantity of wood, and it even changes the condition of the nature of forges by affording the means of building them at a distance from streams of water, which hitherto had been necessary, in order to obtain the moving power requisite for the different operations.

LEWES AND BRIGHTON RAILWAY.—The Brighton terminus is now in course of erection. It is to be in the Italian style of architecture, with a colonnade running quite round the edifice.

TO CONTRACTORS, BUILDERS, FARMERS, AND OTHERS—MIDLAND COUNTIES RAILWAY.

TO BE SOLD, BY AUCTION, by MESSRS. B. PAYNE and SON (who have received instructions from Mr. Betts), on Monday, the 16th of November, and following days, at Crow Mills, Leire, and Gill's Corner, on the line between Leicester and Rugby, the whole of the extensive assortment of

VALUABLE RAILROAD MATERIALS,

which have been used in the formation of the above undertaking, and are disposed of in consequence of the same being completed. Amongst them are an excellent

TEN-HORSE HIGH-PRESSURE STEAM-ENGINE,

in excellent condition, nearly new, fixed complete, with extra shafting for driving and including strong pit hoisting gear, fitted with reversing gearing for working two shafts in contrary directions, breaks and clutch boxes complete, a large quantity of shafting (of various sizes), pulleys, &c., connected with and including circular saws and bench, lathe, with slide-rest, 12-feet bed, an excellent machine, of the newest construction, for making permanent keys for railways, with steaming chest, furnaces, &c., complete, a capital 19-inch and two sets of 6-inch pumps, each sixty feet lift, with rockers, connecting-rods, shafting, &c., a THREE-HORSE POWER HIGH-PRESSURE PATENT FACILITATING ENGINE, by N. Gough, of Manchester, with double barrel 8-inch pump, brass buckets, 22-feet lift, rockers and connecting-rods complete. One HIGH PRESSURE EIGHT-HORSE STEAM ENGINE, at Crow Mills, in excellent condition, having been at work but about twelve months; an excellent machine for cutting screws of any size, with bevilled wheel gearing, which has been attached to the same engine; a strong machine for making washers, punching light boiler plates, &c.; a strong INCLINE GIN, with double-horse arms and pullies, two large drums, 4½ feet in diameter, 6 feet long, with hollow shafting, breaks, &c., complete, and about ninety light pulley sheaves, with turned axles, suitable for colliery inclines, &c.; a large quantity of shafting, spur, and bird-wheels, pullies, &c. A strong upright drill, with shafting attached to chaff cutters and bean mills, the whole fixed for the purpose of the works. A large quantity of apparatus for tunnelling, including skeps, trucks, water-buckets, pit slides, and strong centreing. Upwards of twenty smith's bellows, forges, anvils, troughs, &c., together with an immense quantity of tools;

SIX SUPERIOR CLAY MILLS,

with turned rollers complete; an excellent post crane, equal to eight tons, by Rennie, with treble motion, chain and block complete; a good stayed gin crane, equal to seven tons, fixed on the wharf, with chains and blocks complete; several strong iron double and single purchase crabs and loose crane gearing, of great power, used for lifting stone, &c.; crane chains and ropes, twelve 6-inch iron hand pumps, from 12 feet to 23 feet lift; 600 tons of T. rails, 46 lb. per yard lineal, and about 400 tons of parallel rails and chairs, from 32 lb. to 36 lb. per yard lineal; about 40 tons of pine used for temporary roads; 400 excellent earth waggons, with 2 ft. 6 in. wheels, and 3 in. axles; six 6 in. wheel timber drags and waggons; a great number of 6 and 4½ in. wheel carts, and a quantity of three-wheel ditto; 30,000 sleepers, mostly of ash and larch, suited for collieries, fence posts, &c.; upwards of 300 feet of Memel Balk TIMBER, a large quantity of 4 inch deals, wheeling planks, horse boxes, &c., together with the whole of the horse tackle, chains, blocks, tools, picks, wheelbarrows, water casks, levers, &c., &c.—Also,

The whole of the Wood and Brick BUILDINGS, COTTAGES, STABLES, SHOPS, ENGINE HOUSES, at the before-mentioned places, including all the Racks, Mangers, Chaff cutters, Bean Mills, &c.—Also, about 500,000 Bricks, at various places on the line; 20,000 Pan Tiles; and 40,000 Slates.

N.B. The whole will be particularised in catalogues, and may be had at the auctioneers' offices, Leicester; Crown Inn, Lutterworth; Spread Eagle Inn, Rugby; the "Guardian" Office, Manchester; "Herald" office, Birmingham; the "Journal" office, Gloucester; "Courier" office, Liverpool; "Railway Times" office, London; and at the places of sale, ten days previous.

PUBLIC COMPANIES.

MEETINGS.

Globe Insurance Company	Office, Cornhill	Nov. 10	1.
Bastenne & Gaujac Bitumen Company	28, Moorgate-street, Bank	10	—
Durham and Sunderland Railway	Arcade-buildings, Sunderland	10	12.
West London Railway	Office, 11, Abchurch-lane	11	1.
United Hills Mining Company	Office, Adam's-court	11	1.
Redmoor Consolidated Mining Co	Office, 44, Finsbury-square	11	2.
Imperial Brazilian Mining Association	London Tavern	13	2.
Imperial Continental Gas Association	White Hart-court, Lombard-st.	13	2.
West Cornwall Mines Investment Co.	George and Vulture Tavern	26	12.

CALLS.

Sheffield & Manchester Railway	10*l.*	Nov. 9	Smith, Payne, and Smith.
Taff Vale Railway	5*l.*	9	As former calls.
Manchester & Birmingham R'way	5*l.*	10	As former calls.
Tregedian Mining Company	5s.	14	London & Westminster Bank.
Great Whl. Charlotte Mining Co.	5s.	19	Barclay, Bevan, and Co.
Deal Pier Company	1*l.*	2	Ladbroke, Kingscote, and Co.
London and Blackwall Railway	25*l.*	23	London & Westminster Bank.
Northern and Eastern Railway	5*l.*	23	Masterman, Peters, & Co.
British Waterproofing Company	10s.	23	Office, 243, Strand.
Chester and Birkenhead Railway	5*l.*	30	North and South Wales Bank.
Union Bank of London	5*l.*	Dec. 1	Bank, Moorgate-street.
Manchester, Bolton, and Bury Co.	10*l.*	1	Union Bank of Manchester.
London and Brighton Railway	10*l.*	17	Smith, Payne, and Smiths.

WEEKLY RAILWAY TRAFFIC RETURNS.

LONDON AND BIRMINGHAM RAILWAY.

[*Length of Line*, 112¼ *miles.*]

The gross amount for conveyance of passengers, parcels, carriages, horses, and mails, for the week ending the 31st day of October	£11,271 5 11
For merchandise for the same time	2,016 11 5
Cattle	334 14 0
Total	£14,622 11 4

GREAT WESTERN RAILWAY.

[*Length of Line opened*, 75 *miles.*]

Total Returns for the week ending 1st of November £4390 7 11

LONDON AND SOUTH-WESTERN RAILWAY.

[*Length of Line*, 76½ *miles.*]

Total receipts for passengers, parcels, &c., on this line for the week ending the 30th of October, £4552 19s. 4d.

EASTERN COUNTIES RAILWAY.

[*Length of Line opened (to Brentwood)* 17¼ *miles*]

Total receipts for passengers for the week ending 1st of November £551 19 9

NORTHERN AND EASTERN RAILWAY.

[*Length of Line opened*, 19½ *miles.*]

Total returns for the week ending 30 of November £368 4 4

LONDON AND BRIGHTON RAILWAY—SHOREHAM BRANCH.

[*Length of Line opened*, 51 *miles.*]

Total returns for the week ending 30 of November £68 11 10

LONDON AND BLACKWALL RAILWAY.

[*Length of Line*, 5¼ *miles.*]

Total receipts for passengers for the week ending 5th of November £495 7 0

LONDON AND GREENWICH.	LONDON AND CROYDON.
[*Length of Line* 3¼ *miles.*]	[*Length of Line*, 10¼ *miles.*]
Week ending 5th Nov. .... £202 10s. 4d.	Week ending 4th Nov. .. £502 14s. 10½d.

LATEST CURRENT PRICES OF METALS.

LONDON, NOVEMBER 6, 1840.

	£	s.	d		£	s.	d
Iron, Eng.—Bar *ton*	8	0	0 to 8	15	0	Copper—Foreign.... (*dy.* 57s.)	—
Do. Carg. in Wales	7	15	0	British.—Blocks.... *cwt*	4	2	0
Hoops ..... *ton*	11	5	0	Bars ..... do.	4	4	0
Sheets, ... *ton*	12	5	0	Fance 0	0	0 to 4	2	0
Fig, No. 1 ..... *ton*	5	5	0	Straits 0	0	0 to 4	0	0
Do. in Wales	4	15	0	Tin Plates—I.C. (box)	1	10	0 to 1	12	0
Foreign—Swedes, cn. 8*d.* *ton*	13	0	0	I.X. do. ..	1	16	0 to 1	18	0
Duty 20s. per ton. Russian com... *ton*	14	0	0	(Others in proportion.)			
P.S.I. .... *ton*	15	0	0	Lead, Bill.—Fig ..... *ton*	19	10	0
C.C.W. *ton*	18	15	0	Sheet ..... *ton*	20	10	0
Steel, Eng. Blistered,	20	0	0 to 25	0	0	Shot ..... *ton*	22	0	0
Spear do. do.	40	0	0 ..	24	0	0	Red ..... *ton*	22	0	0
Cast do. do.	45	0	0 ..	24	0	0	White (dry) .... *ton*	17	0	0
Foreign—Swedes in kgs 8*d* *ton*	19	0	0	Do. (gd. in oil) *ton*	20*l*	20*l*	
Duty 10 per cent. Do. Faggots 8*d.* *ton*	20	0	0	Foreign—Spon. (*dy.* 10s.) ..	19	10	0
Allan.... 8*d.* *ton*	0	0	0	Spelter 0	0	0 to 18	10	0
Copper, Brit.—Cake..... *ton*	97	0	0	For delivery 0	0	0 to 23	0	0
Tile ..... do.	95	0	0	English sheets.	30	0	0
Sheets.... 30.	11½d	1s	0	Quicksilver—(*dy.* 4*d.* per lb.)	0	3	11

REMARKS.—The metal market remains the same as last week—steady, with very little business doing.

THE FUNDS.—SATURDAY MORNING.

ENGLISH FUNDS.

Bank Stock, 7 per Cent., 159 ⅞
3 per Cent. Reduced, 87 ⅛ ⅞
3 per Cent. Consols Annuities, 86⅞ ⅞ ⅛ ⅞
3½ per Cent. Annuities, 101⅛, 91¼
3½ per Cent. Reduced Annu., 98¼ ⅛ ⅞
New 3½ per Cent. Annuities, 97⅞ ⅛ ⅞
3 per Cent. Consols for Acct., 86⅞ ⅛ ⅞
Exchequer Bills, 12*s.*, par 1 dis. 1 pm.

FOREIGN FUNDS.

Colombian Bonds, 6 per Cent., 22½
Ditto, 1824, 6 per Cent., 23¼ ⅛ ⅞
Mexican Bonds, 18⅞, 17¼ ⅛ ⅞
Ditto Deferred Stock, 5 per Cent., 8¼ 9
Portugal Bonds, New, 5 per Cent., 35¼
Spanish Bonds, 5 per Cent., 21¼ ⅞
Dutch 2½ per Cent., 54¼ ⅞ ⅞
Ditto 5 per Cent., 105⅞, 92¼ 48

SHARES

Cuylapo Mining Co., 10
Birmingham & Glouc. Railway, 26¼
Bristol and Exeter, 34
Eastern Counties (Deb.) 5½
Great Western 91¼ 2, 89¼ 2 3
Ditto New, 44¼ 7 6¼
Ditto Fifths, 8 7½ 8 7½
London & Brighton, 10 9 ¼ ⅞ ½ 7½ 7
London and Blackwall, 10¼ 15
London and Greenwich, 6
Ditto Bonds, 10¼
London and Birmingham, 163
London and S.th. Western, 51¼ ⅞
Manchester and Leeds, New, 32
North Midland, 74 5 2
Colonial Bank, 20¼
London and Westminster 22¼
National Provin. England, 24

NOTICES TO CORRESPONDENTS.

*** *Unavoidable absence from town of the Editor, in consequence of the death of a much esteemed friend, must plead an apology for the absence of any lengthened observations or comments in the present Number.*

We have received the packet from Mr. M. Dunn, and thank him for the paper inclosed, which shall have insertion as soon as the accompanying illustrations can be engraved; his request shall be complied with.

Quicksilver Mines of Almaden.—The paper on these mines, alluded to by our correspondent, "W. F.," shall appear in the next Number of the *Mining Review*. *Received*—"A Miner"—"J. J. T."—"R. P."—"A Subscriber"—"A Shareholder in Trewavas."

Heimann's Patent Wire Rope.—We have received the promised specimens, but at too late an hour to be noticed in our present Number.

East Tretoil Mining Company.—An accident occurring, just as we were going to press, compels us to postpone our report of the meeting of the proprietors of this company, held on Saturday last.

THE MINING JOURNAL,
Railway and Commercial Gazette.

LONDON, NOVEMBER 7, 1840.

The interest created by the statements submitted last week, having reference to the mining district of Wicklow, induces us to resume the subject, in further directing attention to the mines of Ireland generally, confining our observations to those copper mines, the produce of which is sold by public ticketing. We find that the quantity of ore raised in the past nine months, by two mines alone—viz., Knockmahon and Allihies—have yielded 77,488*l.* 17s., and that the copper and sulphur mines of Ireland produce an annual return of nearly 200,000*l.*—the greater part of which, as we have already shown, is expended in labour, while the cost of outlay for machinery, materials, carriage, &c., may, in a great measure, be said to be also expended in Ireland. The following are the returns, sold by public ticketing, as appears by the statements in the Journal of the past and former weeks, being the produce of the present year, made up to the 30th of September:—

	Tons.	Amount.	Av. per ton.
Mines in Wicklow district..	6242	£19,772 11 6	£3 3 4
Knockmahon Mine	6074	46,576 5 6	7 14 7
Allihies	3715	30,912 11 6	8 6 5
Lackamore	399	3,183 4 0	7 19 6
Kenmare	77	1,132 13 6	14 14 2
	16,457	£101,577 6 0	£41 18 0
Sulphur ores—Co. Wicklow	23,129	37,006 8 0	1 12 0
Total, in nine months ..	39,586	£138,583 14 0	£43 10 0

We feel that it is only necessary to place before our readers mining statistics, founded on correct data, as these are, to induce them to direct their serious attention to the increasing mineral produce of Ireland, the copper and sulphur mines cited above yielding at this moment a sum of no less than 200,000*l.* annually—to which is to be added the produce of her lead mines, collieries, slate, marble, and stone quarries. When we look back some ten or fifteen years, and compare the returns then made with those now presented, the vast increase is really astounding, more especially when the obstacles and prejudices which had to be contended with are duly considered. In the first place, Ireland may be said to present many novel features to the miner, with which he has been heretofore unacquainted, while many speculative opinions have been from time to time put forth on subject of the probable "holding down" of the richness of the lodes in depth—to this we may add the apathy for so many years evinced on the part of the English mine adventurer to embark his capital in Ireland—the want of liberality, in many instances, on the part of Irish landlords, and the want of enterprise in that country—each was in itself sufficient, while all combined to keep back the mineral stores with which Ireland abounds. The amount we have quoted as the produce of the copper mines of Ireland, it must be recollected, is from three districts alone, and in two of those districts only two mines are worked—viz., Knockmahon and Allihies—whose produce for the nine months was 77,488*l.* 17s., while in the remaining one the several mines are within a range of a mile and half, taking the extent of their boundaries on the run of the lodes, and which, with the sulphur ores (found there in such great abundance), yielded in the like period no less than 56,778*l.* 19s. 6d.

As we purpose resuming the subject as soon as we are in possession of data with respect to the other mineral products of Ireland—not so readily accessible as that of the copper mines—we shall not, on the present occasion, dilate on the advantages derivable from the expenditure of money in working the mines of Ireland, but cannot conclude this brief notice without alluding to the praiseworthy endeavours which, we understand, are now being made by some gentlemen associated with the mining industry of the Sister Isle, aided by others connected with the sciences of geology and mineralogy, who, influenced by a patriotic spirit, are desirous of witnessing Ireland independent and happy, by rendering her own resources available—and which we hail with pleasure, as tending to important results, naturally consequent on the establishment of a Mining School in Ireland. Our Hibernian friends are apt scholars, and, the arrangements once made, we may with confidence anticipate its successful working. It will require some diligence and activity to effect the object, and, in the first instance, we consider correct data should be acquired for ascertaining the annual mineral produce of Ireland, and collating statistical information. We shall be happy to receive it from correspondents, and record it in our columns, as also to render any aid in our power.

We have received several letters on subject of the patent wire rope, which has attracted much attention in the mining districts, not only from the paper which appeared in the Mining Review, by M. Albert, with whom originated its use, but from the several notices taken in our columns, and the correspondence to which they have given rise. Several patentees are in the field, each putting forward the advantages of the mode of construction adopted by him, while to no one can the merit be awarded of originality, although each are deserving of commendation for their endeavours to bring it into use. We have had occasion to remark on the unfair and partial observations in the *Times* in more than one instance, and we feel assured that the respectable firm named by the Editor are no parties to the adulation of those who are unable to form a correct judgment, for that we defy any one to do without having the means of establishing a fair comparison. In our columns of to-day will be found a letter from Mr. Smith, by which it appears that his wire rope (a short length, we believe) has been in use for the past three months on the London and Blackwall Railway, while the numerous breakages which have taken place of the hempen rope since the line has been opened, at once evidences its superiority. A correspondent, whose letter came to hand at too late an hour for insertion, informs us that in the neighbourhood of Birmingham "the engineer informed him that at one of the pits, the wire rope (Smith's patent) used being a 2¼-inch, hawser laid, and 150 yards long, gave the engine an advantage of about 19 cwt., it having been substituted for a ⅞-inch common link chain." We have also received a letter from Mr. Mattias Dunn, which will be found inserted, in which that gentleman bears testimony to its superiority over hempen rope, and to which we attach much importance, as being the evidence of a practical and experienced colliery viewer—as also, one from another correspondent, with particulars of the trial of a new rope, manufactured by Mr. Heimann, on the merits of which we shall remark as soon as we receive the promised specimens.

Convinced as we are of the merits of the wire rope (we care not whose patent), we shall at all times avail ourselves of the means afforded us of directing attention to its applicability for mining purposes.

LATEST INTELLIGENCE.

Redruth, Nov. 5.—Average standard, 114*l.* 12s.—Average produce, 7⅞.—Average price, 5*l.* 14s. 0d.—Quantity of ore, 3970 tons.—Quantity of fine copper, 293 tons 13 cwt.—Amount of money, 22,762*l.* 17s. 6d.—Average standard of last sale, 114*l.* 14s.—Produce, 7⅞.

Exportation of the Precious Metals.—The exportation of the precious metals from the port of London to foreign ports for the week ending the 29th ult., was as follows:—Silver coin to Hamburgh, 46,200 oz; Rotterdam, 40,000 oz.; Belgium, 4500 oz.—Silver bars to Rotterdam, 86,000 oz.; Hamburgh, 15,000 oz.

Prices of Shares in Birmingham.—Birmingham Bank, 20*l.*; Birmingham Town and District Bank, 7*l.* 15s.—Birmingham and Derby Railway, 67*l.*; Birmingham and Gloucester, 72*l.*; Eastern Counties, 9*l.*; Great Western, 83*l.*; London and Birmingham, 161*l.*; ditto (quarshares), 26*l.* 10s.; London and Brighton, 27*l.* 5s.; London and Greenwich, 7*l.*; London and South-Western, 53*l.* 10s.; Manchester and Birmingham, 20*l.*; Manchester and Leeds, 87*l.*; Midland Counties, 75*l.*; North Midland, 76*l.*—*Midland Counties Herald.*

Prices of Shares in Liverpool.—Great Western Railway (one-fifth shares), 8*l.* 2s. 6d.; London and Birmingham, 163*l.*; ditto (quarter-shares), 26*l.* 15s.; North Midland, 75*l.*; ditto (new shares), 37*l.*—Bank of Liverpool, 18*l.* 17s. 6d—Liverpool Coal Gas, 380*l.*—*Gore's Advertiser.*

JOINT-STOCK BANKS—NEW CLEARING HOUSE.

Attention has frequently been drawn to the exclusion from the clearing-house of the joint-stock banks, which, while it was an impediment to their operations, caused some inconvenience to the public, and many efforts have been made from time to time to bring the private bankers and the joint-stock banks to a better accord in this respect, but hitherto without any effect. As the joint-stock banks are increasing in number and power, the idea has suggested itself to them of forming a separate clearing-house of their own. No arrangement has yet been formed for that purpose, but the following paper has been prepared as the mode of proceeding likely to answer the views of the joint-stock banks:—

RULES OF THE NEW CLEARING-HOUSE.

1. Any joint-stock bank, private bank, or the Bank of England, may send a clerk to the new clearing-house.

2. The times of meeting shall, if possible, be different from the time of meeting at the old clearing-house, so that the same clerk may attend both—say, the morning meeting at eleven, and the afternoon at half past four. The money to be paid at a quarter past five.

3. Those banks that have branches may or may not pay through the new clearing-house the cheques drawn on their branches, as may be arranged. It seems most advisable that all branch cheques should be received at the morning clearing, but not at the afternoon.

4. As soon as the clearing banks amount to ten, a committee of five shall be chosen for the government of the new clearing-house, and the rules shall be the same as the rules of the old clearing-house, or as near as circumstances will admit.

The following are the advantages of the proposed plan:—

1. The joint-stock banks will clear among themselves (as well as with such private banks as may be disposed to join them), and thus have all the advantages of the clearing-house, so far as regards their transactions with each other.

2. Any private bank that wishes to clear with the joint stock banks may do so without relinquishing its present position in the old clearing-house, although the committee of private banks are against the admission of the joint-stock banks into the old clearing-house; it is believed that many of the bankers themselves are otherwise disposed. These bankers might thus avail themselves of all the advantages of both the old clearing-house and the new one.

3. It is said that the Bank of England has twice applied for admission into the old clearing-house, and been refused, the private bankers fearing that the Bank would then be able to take mercantile accounts. The Bank of England will be invited to join the new clearing-house.

Mineral Statistics.—The average value of the annual produce of the mines of the British Islands amounts to the enormous sum of 20,000,000*l.*—of which about 8,000,000*l.* arise from iron, and 9,000,000*l.* from coal. The mineral produce of Cornwall and Devon alone has recently amounted to 1,340,000*l.* In this estimate the value of the copper is taken in the ore, before fusion; that of the iron, lead, zinc, tin, and silver, after fusion, in their first marketable condition—as pigs, blocks, and ingots—the coal is valued at the pit's mouth.

Copper in India.—A large chain of rocks, lying some depth below the water, have been lately discovered on the coast of Chittagong, on the Bay of Bengal, which are thickly studded with a profusion of rock oysters of an extraordinary size. The fish, when exposed, for the most part assume a deep green hue, and have a disagreeable cupreous flavour, denoting the presence of copper. From the above circumstance, there can exist little doubt that a lode of the latter metal lies concealed in the immediate vicinity, which, if opened, would most probably prove a lucrative source of profit to the mining adventurer who might feel disposed to work the same. About three years since, a small nullah, leading from the Soobooruka river, a little below the Chokee of Dantoon, in Orissa, into the valleys of the Nilgherry mountains, was entered by a small party of enterprising adventurers. The water of this nullah was completely discoloured, being of a clear green shade, and tasted so strongly of copper, that the source of the stream must have been intimately connected with some copper lode concealed in the hills. There is no doubt but that India would prove rich in copper ore, if a geological investigation of certain districts of the country were promoted by the Government, which has not yet been contemplated.

The Mammoth Iron Steamer at Bristol.—A gentleman who has recently seen the immense iron steamer, building by the Great Western Steam Ship Company at Bristol, informs us that she will register about 3000 tons, but that her actual tonnage will exceed 3500 tons, or about 600 tons more than any ship ever built. An immense saving in stowage will be gained, in consequence of the adoption of iron for her hull, whilst her draught of water will be comparatively small, owing to the great buoyancy possessed by iron vessels. She will, consequently, be able to carry coals sufficient both for her outward and homeward passages—a most important point when the inferior quality of coals obtainable in America, and the consequent diminution in speed, is considered. Her engines, we hear, are to be of 1000-horse power, and it is confidently expected that the average voyage across the Atlantic will be reduced to ten days. She will carry a vast spread of canvass, so that in all probability the engines will frequently be at rest. In consequence of the adoption of Smith's screw propeller, this stupendous ship—the greatest experiment in steam navigation ever made—will, we believe, be able to pass the present locks at Cumberland Basin, and discharge her cargo in Bristol harbour. We congratulate our Bristol neighbours upon the enterprise which they are displaying. Two magnificent steamers are now building at Bristol, by Messrs. Acraman, for the Royal Mail Company—and, altogether, the ancient port seems to be "going a-head."

ORIGINAL CORRESPONDENCE.

SMITH'S PATENT WIRE ROPE.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—In reply to "A. C.'s" letter in your Journal of the 22d inst., I beg to refer him to my advertisement, where he will find that, if he will apply personally, or by letter, at the various places named, he will receive every information as to my patent wire ropes he may require. As his letter is dated Newcastle, I refer him to his neighbour, Mr. Dunn, who has now one of my ropes at work. In reference to his allusions to Mr. Martin's letter, and the remarks in the *Times* paper of the 15th inst., the editorial remarks are *ex parte*, libellous, premature, and very injurious to my character; but they having at last inserted my answer, and a certificate,* refuting Mr. Martin's allegations, proving that I had made the wire rope as far back as 1828 (being six years prior to the time mentioned by him), and that it was then experimentally used, I need say no more on that subject.

With regard to Newall and Co.'s patent, where is the rope to be seen, or its merits known?—I fear, nowhere, except in advertisements. This party, through their Mr. Gordon, made several pressing applications to me, both by letter and personally, to grant them a license for manufacturing the article under my patent, which I declined, stating that my arrangements with Messrs. Fox and Co. precluded me from entering into such a negotiation. They then threatened to annoy me—which they have endeavoured to do in advertisements, &c. &c. They know very well they cannot make a wire rope, and apply it to various purposes, without infringing upon my patents. I do not want to wage war with any one, and I regret that Messrs. Newall and Co.'s opposition should have been of the nature it has. If their patent is good, and their rope also—which has to be proved—let them work it, without unnecessarily trying to annoy one in the market before them.

My ropes are now at work in mines in various parts of the kingdom, and have been in ships for the last five years, and, as they are being sent away daily, their merits will soon become better known. I have also had a rope at work on the Blackwall Railway about three months, which has given every satisfaction. I remain, Sir, yours', &c.,

76, Old Broad-st., Oct. 28. ANDREW SMITH.

[We readily give insertion to Mr. Smith's letter, and hope that the differences existing between the several parties will not have any prejudicial effect on the use of the wire rope, which is now admitted to be economical in its application, while its durability is fully proved abroad and at home. The test to which it has been subjected on the Blackwall Railway, where the friction is so great, says much for its superiority over hempen rope. Some remarks will be found in another column.]

NEW MODE OF APPLYING POWER BY PRESSURE AND EXHAUSTION.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—I have read the letter of your correspondent, "W. K. C."—who may be a very clever fellow for aught I know, and, doubtless, is, in his own estimation—but I should like to know, with his post-office balls, how does he propose to drop short? His idea seems to be a "long shot," and his invention would be useful if there was a tunnel through Egypt, whereby our mail dispatches, which are now stopped, could be conveyed. I suppose he means to have a double line, to prevent accidents from collision, or we can hardly say what would be the effect of one of Mehemet Ali's balls, backed by M. Thiers, coming in contact with the quadruple alliance force. I remain, Sir, yours, &c.,

A SCEPTIC.

[What can we say? We must leave "W. K. C." to answer for himself.]

TRIAL OF HEIMANN'S PATENT WIRE ROPES.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—I beg to inform you that the wire ropes of Mr. Heimann were tested at Woolwich Dockyard, on Saturday last, the 31st ult., and I have much pleasure in handing you the result of the trial. I have only to remark, that if the trial relative to strength did not turn out so much to the advantage of the wire ropes as might have been expected, it was principally owing to the ropes having been too tightly laid—a circumstance very difficult to avoid in the manufacture of short lengths, but easily rectified in practice. That such was the case was evident, from the fact that only one or two strands of each rope were broken, and these always the outer ones, which had received a certain degree of additional tension by the insertion of the thimbles, whilst the others remained perfect.

The trial was made to test the relative strength of the wire ropes, as compared with hempen ropes of the same weight; and as the strength of the latter is sufficiently known, by frequent tests, it was not deemed necessary to submit any of them to the proof on this occasion. On the whole, with the exception of the cable-laid ropes, the result of the trial as to strength is decidedly in favour of the wire ropes, as the accompanying comparative statement will show; but the great advantage, in point of economy, to be derived from the employment of the wire ropes for mining and other purposes, will be found in their great durability, for it has been proved, in several mines on the continent, that hemp ropes of a given length, weighing 1800 lbs., had become perfectly useless at the expiration of twelve months, whereas a wire rope of the same length, weighing 900 lbs., employed in the same mine for upwards of two years was very little worn.

As soon as I receive them back from Woolwich I shall have the pleasure of forwarding you specimens of the different sizes of ropes on which the trial has been made. I remain, Sir, your's, &c.,

The Lodge, South Lambeth, Nov. 2. W. KUPER.

RESULT OF TRIAL OF WIRE ROPES.

No.	Wt. per fm. Lb.	oz.	Circumfer. Inches.	Broke at. Tons	cwt.	Stretched at. Ton	in.	Length of. Ft.	in.	Hemp* Tons.
9	16	4½	4¼	20	10	{10—0½ / 20—2½}		—		20
11	10	11½	4	12	15	16—2		9	8	11 to 12
13	7	0	2¾	10	10	{5—0½ / 10—0½}		17	6½	10
14	4	15	2½	7	5	5—1½		19	10½	6
15	4	1½	2¼	6	5	5—1½		20	10½	5
16	1	14	1½	2	15	2—2		21	6½	2
20	1	5-12	1½	1	18	1—4		17	6½	1½
16	26	0	6½	28	10	10—0½		about 9	0	26
18	13	1½	—	14	10	—		—	—	18
20	7	1	3½	6	15	—		—	—	10
24	3	4½	2½	4	0	3—4½		—	—	5

Nos. 18 and 20 broke in the thimbles before their strength could be properly ascertained, owing to the lashings giving way, and the thimble cutting the rope.

* This column shows the computed strength of hempen rope of the same weight.

[We have carefully read the letter of our correspondent, and cannot but think that in the manuscript some error has crept in—Mr. Kuper states that "the trial was made to test the relative strength of the wire ropes as compared with hempen ropes of the same *weight*." If such be the case, the results appear to us anything but satisfactory, as the strength of the two descriptions of ropes of the same weight appear nearly alike, while the cost of the wire rope is, we presume, double that of hemp. We hope, however, to get some explanation, and, therefore, reserve our comments until next week, when we shall report on the specimens referred to.]

SCHOOL OF MINES.

TO THE EDITOR OF THE MINING JOURNAL.

"Manual labour is a school in which men are placed to get energy of purpose and character—a vastly more important endowment than all the learning of all other schools."

SIR,—Your untiring and able advocacy for the establishment of a School of Mines, and the interest you at all times take in whatever tends to improve the condition of the working miner, induces "one of themselves" to place the following crude ideas, or loose hints, at your disposal. I have worn the miner's jacket upwards of thirty years—from childhood, Mr. Editor—and I am thankful to Providence for my lot—I aspire to no other distinction than that of a British workman. The dearest wish of my heart would be to give whatever feeble support is in my power to those of "my order." We have not unfrequently heard workmen, who have risen to affluence and power, tell they were proud of having begun to rise at "the lowest step of the ladder;" but, in most cases, it is quite apparent their sources of pride and thankfulness were not that they had been in the condition of the labourer, but that they had escaped from it, into what is considered a higher rank—which, indeed, they too often prove, by their neglecting to share any sympathy, or interest, in common with those of their old acquaintances—many of whom, to say the least, must be their equals, in every noble quality, either of head or heart. They not only forget they are indebted to the hard labour which they have had to undergo for the practical knowledge for which they are prized, but they also forget, if, indeed, some ever knew, that it is also to such they are indebted for their "efficiency, courage, capacity of endurance, and persevering devotion to far reaching plans," and for the strengthening and bringing out of their intellectual powers, as well as for their proficiency in mechanical skill.

It is beyond controversy, that as a nation we are largely indebted to the genius of British workmen for inventions and improvements, whether as regards mines, manufactories, or engineering, and it is not too much to suppose, that many of these men, who have thus distinguished themselves, and benefitted their country, would have made a very different figure in the world, had they been reared in the lap of luxury and ease, and not had difficulties for assistances. For my present purpose, it might be enough to state that the most numerous and successful of our British mines, are now, and ever have been (virtually were, not nominally) under the direction of men whose early life was that of manual labour. This consideration ought to be sufficient to convince the most obtuse of the advantage of bringing a higher standard of scientific education within the reach of all. To the high souled and true philanthropist such arguments are not required, his desire is to elevate the moral and intellectual powers of his fellow men, because they are men, not because they may be useful in every particular trade, and his exertions contrast favourably and beautifully with those who only talk, and pretend to compassionate the miners, on account of their physical sufferings, whilst they consider as unworthy of their attention the only means whereby the poor man's condition could be permanently improved.

The idea of establishing a School of Mines in each extensive mining locality is so far good, and, I think, for the benefit of my own class, to whom I should hope there will also, in other respects, be given a "clear stage, and no favour," which is all I shall ask. I have already said that our managers, although taken from among ourselves, seldom feel any interest in our behalf; I would, therefore, object to the nomination of free students being given to the overseers of mines, as the overseer would probably be misled by his manager, or the manager by his deputy, as to the most deserving person. The sources of corruption and favouritism, in this respect, is already sufficiently great, without extending it. If free students are to be admitted at all, it should be such young men as can give some proof of their sobriety and industry as miners, as well as evidence of some progress made in the improvement of their minds—say able to read English well, write a tolerably good hand, and have acquired a knowledge of the simple rules of common arithmetic. I have seen it suggested, that the sons of engineers and managers should get a preference, as free students. Now, if these sons have not had the advantage of similar "early schooling" with their fathers (to use a sportsman's phrase), this is something like "hunting the back scent" for talent.

I remain, Sir, very respectfully, your's, &c.,

A WORKMAN.

[Our correspondent must be aware, that the suggestions to which he refers are but crude ideas, and are merely put forward by Sir Charles Lemon, or those taking an active part in establishing a Mining School in Cornwall; and in this, as in other cases, it will, doubtless, be found, that a course which may be applicable in one district will not be suitable to another. We do not intend, on the present occasion, to enter on the subject, but feel confident, that no free students would be admitted simply because they were the sons of engineers and managers.]

PATENT WIRE ROPE—RESULT OF ITS APPLICATION IN ST. LAWRENCE COLLIERY.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—Seeing that your Journal contains sundry inquiries as to the real merits of the wire rope, and as I believe I am the only person in this part of the country who has applied it to practical purposes, I beg to give you the result, as far as it goes. The rope is applied to the drawing of coals up a staple, far distant from the shaft, in the St. Lawrence Colliery, which staple is seven fathoms deep. The hempen rope, before used, was five inches circumference; the wire rope consists of four strands, of thirty wires each (No. 17 wire), the circumference of rope two and a half inches, weighing 4 lbs. per fathom. The horse-gin is six feet diameter, and the pulleys overhanging the pit two feet diameter; length of each rope eleven fathoms.

The cage or frame for the tub to rest upon is	2 cwt.
Chains and apparatus	1 "
Tub of iron, with wheels, &c.	3 "
Coals	7 "
Total	13 cwt.

An ordinary day's work consists of upwards of 400 tubs. This rope (Smith's patent) was set to work upon the 30th of September, and has, during the month, drawn upwards of 3800 tons of coals, besides changing all the men and boys, and it does not evince the least appearance of wear—indeed, it has become greatly more pliable and easy than at first, and is, beyond doubt, a very great saving of draught, not only because of its weight, but its much greater pliability, as compared with a hempen rope, of corresponding strength; and, as for durability, I have now not the least doubt of its proving vastly more lasting and economical than hemp. However, Sir, it is now upon its trial, and I may hereafter trouble you with another notice of it. I remain, Sir, your's, &c.,

Newcastle-on-Tyne, Oct 30. MATTHIAS DUNN, Colliery Viewer.

[This report of Mr. Dunn, on the merits of the patent wire rope, requires no comment on our part.]

TIN TRADE—SMELTERS versus MINERS.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—The gentlemen who have been occupying your columns for the last three or four months on the tin trade question, have wished to make it appear that their great object has been to benefit the tinner; and we have been told, that to such an extent has their benevolence surpassed their commercial prudence, that, for many years, our smelting merchants have been giving to the tinners greater prices for their black tin than they could realise a remuneration for in the sale of the white. A mass of statistical information has been collected, for which we ought to be obliged; but I cannot for my life imagine—so dull am I of comprehension—what these statistics have to do with the real gist of the matter. The whole affair seems to me to resolve itself into a very small compass. Have the merchant smelters gained more than 2½ per cent. on their purchases of black tin? If they have not, surely they might direct their capital into some other channel than the tin trade, without making so much fuss about it. If their profits have exceeded this proportion, and if we who are tinners can find houses of equal integrity, solvency, and commercial ability with themselves, who will give us the whole amount that our tin will produce in the London and other markets—less 2½ per cent. as a commission for their trouble and risk of guarantee—why should not we avail of such an occasion to make the most of the goods we risk so much capital, as wine adventurers, to raise from the bowels of the earth? We have found such houses—nay, more—if we want advances of cash pending the operations of smelting in Cornwall, and selling in London, these houses have consented to advance us, at the rate of 5 per cent. per annum, about seven-eighths of the value of our black tin, on the very day of our lodging it at the smelting-house. We seek no monopoly—we ask no more than fair prices for the goods of our own produce—the value they shall be found to be fairly worth in the home and foreign markets. The commission houses in whom we have placed our confidence are of as old a standing as the friends of "Honestus;" and until he can impugn their character, I maintain that the Cornish tinners have done wisely to place their black tin in the hands of men who will, for a commission of 6d. in the £1., guarantee to them the full produce of the white tin at market, with an intermediate advance on account whenever required, at the usual interest. The smelting is done for us at cost price, and we have full opportunity, through our committee, of inspecting all the accounts, as well in Cornwall as in London. A week since these accounts were laid before us, and their examination afforded the most entire satisfaction to men perfectly conversant with matters of business. The association has been likened to a rope of sand, which could not last three months. It would, of course, be most desirable that all the miners should come into the measure, but the withholding of Messrs. the Charlestown Adventurers, can only tend to their own loss, or to the loss of the merchant smelters buying of them. If their white tin bring at market a surplus of more than 2½ per cent. over cost and charges, the difference will be to the loss of the mine. We, of the association, shall continue to consign our tin to Messrs. Vigers and Co., and Messrs. Fermin de Tastet and Co., notwithstanding all attempts to mystify us. I am, Sir, your obedient servant,

St. Just, near Penzance, Nov. 4. A ST. JUST MINER.

REPORTS OF IRON WORKS AND COLLIERIES.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—I am not singular in my opinion that you do not pay that attention to iron works and collieries which might be expected from a Journal professing to give all information respecting mines, as its title indicates. It is true, we have the mining reports! of sundry scrip companies, which take up much space—we have reports of meetings, which only tend to disgust, instead of to interest, your readers—and that vast branch of our mineral production to which I have referred is hardly noticed. I wish that you would direct your attention to our neighbourhood, some ten miles round, you might find ample room for observation, even without touching on your favourite anthracite question.

I remain, Sir, your's, &c.,

Swansea, Oct. 28. IRAN.

[We should readily give information did we possess it—perhaps our correspondent will aid us. As regards the works in the locality from whence his letter is dated, we believe our report would be but so-so. The furnaces at Neath are out of blast, also Oakwood, and others—the Cambrian have started one—the Ystal-y-fera are working, we believe, under favourable circumstances, but we will endeavour to get a report on an early occasion.]

ON THE GREAT FAULT, CALLED THE "HORSE," IN THE FOREST OF DEAN COAL-FIELD.

BY JOHN BUDDLE, ESQ., F.G.S.

The term "fault" is used in the miner's signification, or for any interruption in the regular deposition or range of a bed. The Horse Fault, therefore, is not a displacement of one part of the stratum by a dislocation, but a local thinning out of a bed of coal, and a substitution of sandstone for it.

The Horse has been traced in the Coleford High Delf seam, the twenty-third in the descending series, or the third from the bottom, and the only one in which it is clearly developed, for about two miles; and its known breadth varies from 170 to 340 yards. The only point at which it has been tunnelled through in a transverse direction, is under Barn-hill enclosure, between Brixslade and Howler's-slade valleys, and its width is there about 200 yards. The upper surface of the seam of coal, to a considerable distance on each side of the Horse, undulates considerably, producing depressions called "lows," and great variaties in the thickness of the bed; but the pavement, composed of the ordinary argillaceous deposits, which accompany the seam throughout the basin, preserves nearly its ordinary regularity.

The roof of the seam consists of the strong sandstone which usually reposes upon the Coleford High Delf, but a layer of black slaty substance is sometimes interposed between it and the coal. This sandstone extends to the surface, varying in thickness according to the undulations of the ground, but at one point over the Horse, the thickness is ninety-four yards. The sandstone sometimes passes into a conglomerate, containing fragments of coal, ironstone, and vegetable remains; also quartz pebbles, similar to those which abound in "the pudding-stone"—a deposit between the carboniferous limestone and the old red sandstone, and which attains a considerable elevation in the adjoining hills. The sandstone also encloses concretions of highly indurated, ferruginous sandstone, scattered irregularly throughout its mass; and angular fragments of obliterated casts of vegetable remains, formed likewise of highly indurated sandstone.

The coal under the lows is generally mixed with particles of the sandstone of the roof; but it contains no boulders, angular fragments, or pebbles, as asserted by some observers; the supposed boulders and fragments being the concretions and vegetable remains of the roof, alluded to in the preceding paragraph.

The fall of the Horse conforms to that of the strata, or S. 31° E., but whether the "fault" rises with the seam of coal to the outcrop on the S.E. side of the basin, remains to be proved. In the transverse section, the bed of the Horse is nearly horizontal.

There are no indications on the surface by which the horse can be traced beyond the limits explored under ground; and whether it produces any change in the overlying seams, can be determined only by future works.—Mr. Buddle infers, that it does not descend any lower than the Coleford High Delf seam, in consequence of the evenness of the floor, and the entire absence in it of sandstone.

In its underground characters the Horse is similar to the "washes" or aqueous deposits in many coal-fields, but it differs in not underlying a river bed, or being in the bottom of a valley, and in not extending to the surface. In the Newcastle coal-field all the "washes" cut through the whole of the strata, from the surface to that on which the wash reposes.

In the workings of the Park End Colliery, in Park End High Delf seam, which is situated fifty fathoms higher in the series than the Coleford High Delf, and two miles to the S.E. of the point to which the Horse has been traced, a great succession of "lows" has been found in crossing the line of the Horse, but no fault corresponding with the Horse. The coal is deteriorated in the same manner as in the Coleford seam. This colliery is situated beyond the centre of the basin, and where the strata rise in the opposite direction. Future workings alone can determine if there be any connection between the Horse and these "lows."

In the direction of the Horse there is also an extraordinary oval depression of the Coleford High Delf, the centre of the seam being twenty feet below the ordinary level; and it remains to be proved if the Horse presents the same characters under the depression as elsewhere.

[From the phenomena exhibited by the Horse and the adjacent coal-seam Mr. Buddle is of opinion, that the fault and seam occupy the site of a lake, which existed during the deposition of the latter, and that the carbonaceous matter, which forms the seam, was accumulated while the water was deep and tranquil; that the undulations on the surface of the coal were occasioned by the action of the water when the lake was discharged; and that the Horse occupies the bed of the stream by which the complete drainage of the lake was effected. The sandstone of the roof, and that which fills the lows, he conceives, on account of the fineness of the grain, were tranquilly deposited.]

MINERAL VEINS OF THE SIERRA ALMAGRERA, IN THE PROVINCE OF ALMERIA, IN THE SOUTH OF SPAIN.

BY J. LAMBERT, ESQ., F.G.S.

The Sierra Almagrera extends from the mouth of the Almanzora (lat. about 37 deg. 17 min., long. about 15 deg. 40 min.) in a N.N.W. direction for twelve miles. Its width is about a mile and a half, and its greatest height 1400 feet. It is composed of clay slate, resting upon mica slate, accompanied by beds of milky quartz, and crossed by numerous ferruginous veins containing sulphate of barytes and gypsum. The strata of the clay slate are generally horizontal, but are sometimes inclined from 15 to 20 deg., and even more, where disturbed by masses of greenstone.

The vein of the Barranco Jaroso was the first discovered, and it is now of considerable richness. Its excavations extend more than 300 yards in length, with every indication of the lode continuing. The direction of the vein is north to south, between one and one and a half hours, or 15 to 22½ deg. east of north; and the inclination is from 65 to 70 deg. east. The breadth of the vein, where it was commenced at the surface, was half a yard, but it had increased to three yards at the depth of forty yards, the point to which it had been carried in April, 1840. The mineral contents of the vein consist of parallel divisions of several varieties of galena, as crystallised, radiated with an antimonial aspect, brilliant large-grained, fine steel-grained, and black, of oxide and carbonate of lead, and argillaceous iron ore; carbonate of iron and carbonate of copper also occur; and sulphates of barytes and gypsum are abundant.

Old workings, supposed to have been conducted by the Romans, occur in great numbers, principally at the mouths of the Barrancos or ravines of Pinabo del Frances and de la Torre. Quantities of mine timber, decayed iron tools, and lamps of clay, have been found in them; but in no case does it appear that gunpowder was used in making the excavations. Large heaps of slags and scoria are of frequent occurrence; one of the most important being situated between the confluence of the Almanzora and the Rambla de Muleya, at the foot of the little hill Cabéza de las Herrerias (Head of the Forges).

This hill (Cabéza de las Herrerias) presents the aspect of a volcanic crater, and has disturbed the tertiary deposits of the neighbourhood. It is an enormous mass of oxide of iron, with a multitude of veins of sulphate of barytes; and it is absolutely honey-combed by old excavations in the barytes veins, the contents of which were used as a flux in smelting the argentiferous minerals. The tertiary beds at this locality consist of clays resting upon conglomerates, and are all charged with iron. They contain also "ferruginous and jaspery dendrites," veins of felspar and crystals of barytes.

A tertiary formation extends from the foot of the Sierra Almagrera to the Sierras de Filabres, de Alhamilla, and Cabrera. The upper part consists of an arenaceous conglomerate alternating with marls, and beds of quartz and other pebbles of various sizes. The clays contain gypsum and sands very similar to those of the vicinity of Paris; and numerous organic remains, belonging principally to the genera Ostrea, Pecten, and Dentalium—likewise corals. The formation is disturbed in many parts by protruded masses of

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[From the Times, October 27th.]

* SIR,—I consider my character injured by Mr. Martin's letter, and your remarks, in your Journal of the 15th inst. The following certificate will prove the originality of my invention, which I will thank you to insert.

Your opinion respecting Mr. Newall and Co.'s rope I will say nothing about; the law will determine whether it is an infringement of my patent or not, as soon as they make sales. I am, Sir, very respectfully, your's, &c.,

76, Old Broad-st., Oct. 17. ANDREW SMITH.

"This will certify, that Mr. Andrew Smith made for the late Mr. Westwood, of Prince's street, Soho square (whose foreman I was at the time), two wire ropes for hanging a metallic shutter experimentally, in the latter end of the year 1827, or the beginning of 1828, and they were used for that purpose at that time.

"*46, Prince's-st., Leicester-square, Oct. 16, 1840.*" "J. WALKER.

greenstone; also by porphyries, trachytes, and basalts, which are stated to present very singular phenomena. Gneiss projects above the tertiary strata in many places.

The following are analyses of specimens of galena:—

		Lead.	Silver.
Specimen, No. 1.	79·8 per cent.	1·05 per cent.	16 oz. per gal.
—— 2. Radiated..	62·1 "	0·65 "	10 4-10 "
—— 3. Black	27·25 "	0·325 "	5 2-10 "

About 400 tons of Nos. 1 and 2 have been extracted from the mine during the months it had been worked; and the produce about the time this paper was written was fifteen tons a-day.

MINING CORRESPONDENCE.

ENGLISH MINES.

HOLMBUSH MINING COMPANY.

Nov. 2.—I beg leave to inform you, that the lode in the 100 fathom level west still holds good, both in size and quality, being eighteen inches wide, and worth 30*l.* per fathom for ore. The lode in the winze, sinking below this level, is without alteration, still one foot wide, and worth about 10*l.* per fathom. In the ninety fathom level, west of James's winze, the lode is fifteen inches, and worth two tons of ore, or about 14*l.* per fathom. In the ninety fathom level, west of Dennis's winze, the lode is twenty inches wide, and worth about 35*l.* per fathom. The eighty fathom level west is still driving in favourable ground, but is not yet sufficiently extended beyond the influence of the cross-course, so as to admit of cross-cutting to the lode. In this level, driving east, the lode is ten inches wide, producing stones of copper ore, but not rich. In the winze, sinking below this level, the lode is sixteen inches wide, and worth about 30*l.* per fathom. The stopes in the back of this level are still producing a large supply of ore, the lode being twenty inches wide, and worth 34*l.* per fathom. The lode in the seventy fathom level, stopes, is two feet wide, and worth three tons of ore, or 26*l.* per fathom. In the sixty fathom level, south on the lead course, the lode is eight inches wide, producing stones of silver-lead ore. The western stopes, in the back of this level, are set to two men, at 6*s.* in the *l.* The lode in the eastern stopes, in the back of this level, is two feet wide, and worth about 12*l.* per fathom. Bray's shaft is still sinking, with good progress. The tribute pitches, upon the whole, are still wearing a favourable appearance. We weighed on Saturday, the 31st ult., September ore, 204 tons 20 cwt. 2 qrs., and sampled October ore, computed 220 tons, of good quality.

F. Phillips.

TRELEIGH CONSOLS MINING COMPANY.

Oct. 31.—Our prospects are gradually improving, both at Shanger and Christoe. Shanger lode looks well; at the twenty fathom level it is four feet wide, worth 7*l.* or 8*l.* per fathom, and the lode in the shaft has a very promising appearance. We have taken down the lode in Christoe engine-shaft, and find it two and a half feet wide, eighteen inches of which is good for ore, and worth in sinking from 20*l.* to 25*l.* per fathom. The sixty east is also looking well; the lode is eighteen inches wide, with a leader of ore worth 4*l.* to 6*l.* per fathom, which holds a likelihood of an improvement. The sixty west is not so good as it has been, but the lode is two and a half feet wide, producing saving work, and opening tribute ground. The fifty east is about five fathoms behind a bunch of ore discovered in the forty, where we have set a winze to sink at 40*s.* per fathom; the winze has a good appearance, and is worth at least 16*l.* per fathom in sinking. The tribute department has a promising appearance.

W. Sincock.

REDMOOR CONSOLIDATED MINING COMPANY.

Oct. 28.—Having this day inspected this mine at your request, we beg to lay before you our few remarks on the same. Our attention was first drawn to a lode which has passed through the engine shaft, about five fathoms above the back of the forty fathom level; this lode is large, composed of mundic, spar, and good stones of copper ore, and, from its direction, we are of opinion it will fall in with the great south lode, in going west, at which point, if not before, we expect a favourable change will take place. In examining the cross-cut, at the thirty fathom level, our attention was drawn to a lode driven through about eighteen fathoms north of the great south lode, which is about twenty inches wide, composed of mundic chiefly, with some copper ore, underlaying a little north, and has, on the whole, a very promising appearance. The great south lode is underlaying about three and a half feet in a fathom north—consequently, these two lodes will fall together in depth, which is another important point to be looked at. At the thirty fathom level, the great south lode has been extended on, in an easterly direction, about twenty fathoms, for several fathoms of which the lode has a very promising appearance, being about two and a half feet wide, composed of mundic, spar, with good stones of copper ore, sufficient, in our opinion, to warrant the sinking of the engine-shaft to see the lodes at deeper levels; as to the strata about the lodes, we think it of the most favourable character, and quite congenial for copper ore. We can say but little of the silver-lead lode, at this level, a few feet only having been driven on it, but, so far, it looks a very promising branch. At the twenty fathom level the great south lode has the same kindly appearance as at the the thirty, and tributers are now at that level raising some good copper, almost immediately over where the present end is at the thirty. This lode, at every level, very highly recommends itself, but we think will be found most productive at deeper levels. There are other lodes in this sett which [illegible] your attention—one in particular, at Hurl Down, said to be the Holmbush copper lode, has a very promising appearance, where it is intersected in Hurl Down shaft; it is about one foot wide, of gossan and spar. This we would recommend to be pursued in the way which Captain Rowe has already described to you. With regard to the operations in general, we beg to say, we see of no better mode of working the mine than that already proposed by the agents of the mine—*i. e.*, to sink the engine-shaft with all possible expedition—cross-cutting, and find the lodes at the forty fathom level and below—to continue to drive the thirty fathom level east—and to let all the ground that will let on tribute; and we are of opinion, by persevering in this way, there are very fair chances of ultimate success.

W. Paul. F. Phillips.

WEST WHEAL JEWEL MINING ASSOCIATION.

Nov. 3.—In Buckingham's engine-shaft the men are still employed cutting the platt, &c., at the fifty-seven fathom level. In the fifty-seven cross-cut south we have cut through the north branch, and find it from six to eight inches wide, producing good stones of yellow ore; the ground is a great deal more favourable as we drive south of this branch. The forty-two and thirty, on Wheal Jewel lode, have not been taken down in the past week. The forty-two east, on the south lode, is one foot wide, mundic, and spots of ore. The twenty west, on this lode, is worth 6*l.* per fathom, and sinking in the deep adit it is worth 5*l.* per fathom.

Stephen Lean.

TAMAR SILVER-LEAD MINING COMPANY.

Oct. 29.—We have twenty two pitches working, varying (in their tributes) from 7*s.* to 14*s.* out of 11*l.*, on the value of the lead only, and employing fifty-three men as tributers. I have carefully surveyed the underground operations, and the following are the prospects, &c., of the different levels:—At the 125 fathom level, driving south of the engine-shaft, the lode is about six inches wide, with a small portion of ore mixed in capel and spar. In the winze sinking below this level, to the 135, the lode is three feet wide, and yielding some ore. At the 115 fathom level the lode is one foot big, and very ground, however, rather hard. At the 105 fathom level the lode is from nine to twelve inches wide, producing some good work, and passing through tribute ground. At the 95 fathom level the lode is two feet wide, and for that width yielding some good work—a very promising level. The 85 fathom level is now in a soft stratum of ground, which has at present disordered the lode; we are aware, however, that there is before us, at no great distance, judging from the appearances of the lode gone down in the bottom of the level over, some considerable length of good ore ground. We again resumed the driving of the 75 fathom level, having obtained a better supply of air in that part than when we last suspended it, about three months ago; this level appears very promising, and is likely, by extending it, to prove productive, and throw open a great deal of ground for tributers. The 65 fathom level we consider proper to suspend for some time, until a greater length of ground is opened in the 75 and 45 fathom levels; in the latter, the lode, we believe, is becoming more settled, and we hope ere long will get into ore strata. We have eight bargains working, employing thirty men on tutwork. Our last parcel of ore sampled was on Thursday last, 22cl feat., computed fifty-six tons, which we consider to be of very good quality, judging from the public assay. In conclusion, I beg to say that I consider the prospects of the mine altogether quite as good as I reported to you when in town, at the annual general meeting, held on the 12th inst.

R. Rowe.

TRETHOIL MINING COMPANY.

Nov. 2.—The lode in the engine-shaft is producing some good ore; three fathoms have been sunk this month, in a lode about twenty inches wide, which is likely to produce good tribute ground, when driven on; the shaft is now down about six fathoms below the thirty. In the thirty end west the lode is about two feet wide, good tribute ground; about ten fathoms driven this month, much the same. In the thirty east the lode is small and unproductive; about eight fathoms driven, much the same. In the twenty, west of Johns's shaft, the lode is small, and unproductive; nine fathoms driven, much the same. In the twenty, east of Williams's shaft, the lode is one foot wide, tribute ground; eleven fathoms driven, much the same. The lode in the rise, in the back of this level, is about fifteen inches wide, very good tribute ground; six fathoms risen, much the same. In the rise, in the back of this level, the lode is eight inches wide, tribute ground; five and a half fathoms have been risen, much the same. The lode in the ten fathom level, east of Williams's shaft, is nine inches wide; six fathoms driven this month, much the same. Four winzes have been holed; two from the twenty to the thirty have opened good tribute ground throughout the first six fathoms, and that from the adit to the ten fathom level has opened much the same. On Friday last (our setting-day) twenty-four pitches were set in different parts of the mine; four at 10*s.*, two at 9*s.*, two at 8*s.*, one at 7*s.*, two at 6*s.* 8*d.*, two at 6*s.* 6*d.*, five at 5*s.*, one at 4*s.* 6*d.*, one at 4*s.* 3*d.*, one at 4*s.*, one at 3*s.* 4*d.*, one at 2*s.* 11*d.*, and one at 2*d.* The cross-cut towards the mine part is progressing in good ground. We intend to sample about 215 tons of ore on Monday, the 16th November, being about the quantity of ores raised in October.

Henry Williams.

UNITED HILLS MINING COMPANY.

Nov. 3.—Adit End East—No more lode discovered in driving south. Adit End West—Lode one foot wide, with some good stones of ore. Thirty fathom Level—Lode three feet wide, producing some ore, with a very promising appearance. Thirty-six Fathom Level—In the eastern end of this level no alteration; western end level three feet wide, one foot on the south part producing ore. Forty Fathom Level—In driving west of James's shaft the lode is about eighteen inches wide, six inches on the north part good ore; driving east of western shaft, two feet six inches wide, two feet very good for ore. Stopes West of Nettle's Winze—In these stopes the lode is four feet six inches wide, two feet on the north part good ore. Stopes East and West of Webber's Winze—No alteration since our last. Eastern Shaft—Lode three feet wide, and improving in appearance since the last report. Fifty Fathom Level—East of Williams's shaft the lode is two feet wide, producing but little ore. Williams's shaft—Commence breaking down the lode in this shaft to-morrow.

Cyrus Penrose.

WHEAL LEEDS MINING COMPANY.

Oct. 31.—The Eighty Fathom Level, East of Engine-shaft—Lode three feet wide; the whole is saved for ore, though it is not rich; the eighty fathom level west has been suspended. The Cross-cut South, at the Eighty Fathom Level—We have cut a branch, in which there is very rich stones of tin, and expect to cut the ore branch or lode soon; the ground is much improved, and set at 5*l.* instead of 10*l.* Seventy Fathom Level West—Lode ten inches wide, producing two-thirds of a ton of ore per fathom. Sixty Fathom Level East—Lode fifteen inches wide, with branch ore four inches wide in the middle of the lode—very kindly end. Winze under the Fifty Fathom Level, East of Engine-shaft—Lode eighteen inches wide, orey throughout, and very promising. The Rise over the eighty fathom level west is set at 4*l.* per fathom.

C. H. Richards.

GREAT WHEAL CHARLOTTE MINING COMPANY.

Nov. 3.—There is no change worth mentioning in the prices of the tutwork bargains, though I am glad to be able to report a continued improvement in the productiveness of some of them. The seventy-two east and west are both looking better than when I last wrote to you; the former will turn out three tons per fathom, and the latter from three to four tons per fathom. The lodes in each are of a very kindly nature, and, I think, will be much better yet; the quality of the ore in each of these ends is better than it has been. Captains Stevens and Trevethan estimate them at 20*l.* per fathom, taken together. The winze mentioned in my last report from the sixty-two fathom level, is now completed to the seventy-two, and the stopes under the former level can now be worked to much greater advantage than before; and I am happy to say the lode in these stopes is much improved, and is yielding us considerable quantities of ore. We have commenced a new winze under the sixty-two, further west; the lode in it is large and orey, but not so rich as when we commenced sinking. The sixty-two west is, I think, already affected by the slide, although we do not yet actually see the slide in it. The lode has become poor, or at least not producing more than two or three tons of ore per fathom, and its underlay is so changed, that it is nearly flat. My reports of late will have prepared you to expect that we should soon meet the slide at this level, and it will, therefore, cause you no disappointment. The winze under the fifty-two will, I hope, be holed to the working over the sixty-two in a few days; this is much to be desired, as the air is very bad in these workings. The engine-shaft has cut so much water by approaching the lode, that we can sink it no further without a larger lift of pumps; and these I have at length been able to purchase second hand, but, as I am assured by Captain Trevethan, nearly as good as new, at 6*s.* per cwt. The shaft was sunk a fathom and a half in last month. I shall be much disappointed if we fall short of the 180 tons at our next sampling; but the captains are pretty sure of their mark by this time, I think, and they tell me I need not fear any deficiency from the estimate. The deficiency in the amount produced by the last sale was considerably increased by the sudden drop of the standard from the time I estimated it at 600*l.*, and I fear the standard will make against my calculation of the value of the 180 tons.

FOREIGN MINES.

ST. JOHN DEL REY MINING COMPANY.

Morro Velho, August 13.—Produce.—The arrears have now all been reduced; these, together with the produce for July, amount, I am sorry to say, only to 8096 ozs. of gold—therefore, deducting for arrears of June 2866 ozs., would only leave the produce for July 5230 ozs. 57 grs., which would be very poor indeed, and, in my opinion, incorrect, as, in reducing the arrears, I made use of the batela, and from five days' stamping we obtained 1216 ozs. in dust; allowing 1216 ozs. in dust, and allowing that the Herring stamps did not go to work till the 7th July, would leave the produce for July as about 7000 ozs.—therefore, I can only say, suppose that a mistake has been made, in estimating the arrears, and which would have been carried on had they not all been reduced. Mechanics have not made any progress with the arrastres; the carpenters—the greater part—are engaged securing the stamp skins and launders, and sundry jots for the mine, which were put off till the Herring stamps were completed.

Medical Department.—I have to report the death of two of the company's negroes.

Reduction Report.—The arrears are at length reduced, and the gold extracted, which, I am sorry to observe, does not come up to my expectations, being only 8096 ozs. 57 grs.—this includes the produce for July; I can, therefore, only suppose, that when we changed the system of treating the sand by concentration, some error may have crept into my estimations of the arrears. This alteration commenced the latter end of May, and supposing the arrears of April last to have been correct, the produce for the months of May, June, and July, will stand thus—

	Ozs.	grs.
Gold extracted in those months is.....	23,614	21
Deduct for the arrears of April	3,808	0
	19,806	21

And which gives an average produce per month of 6602 ozs. It is possible that the error may have been of a longer standing, as, since the Lyon stamps went to work—now upwards of two years—I have always had a considerable quantity of arrear sand on hand, and, in estimating its value, I have been guided more or less by the gold extracted from the sand produced in the month when the accumulation took place. I hope in future, by being allowed to reduce separately all the sand appertaining to each month's stamping, to avoid an occurrence of a similar nature.

J. Smyth.

NOTICE OF THE SIERRA DE GADOR AND ITS LEAD MINES.

The Sierra de Gador, celebrated for its lead mines, is situated between the Sierra Nevada and the Mediterranean. Its length, from west to east, is nearly forty miles; its breadth varies from five to ten miles, and its highest point—the Collado de los Vallentes, near its western extremity—is upwards of 6000 feet above the sea. From that point eastward the height gradually decreases till it is reduced near the Almeria to the level of that river. The southern face is precipitous, and from its base to the Mediterranean extends the tertiary plain of Dalias. The western flank is also precipitous, but the northern face rises more gently from the river Almeria, which separates the Sierra de Gador from the Sierra Nevada.

The principal mass of this range of mountains is composed almost exclusively of a limestone, considered by Mr. Lambert to belong to the lowest of the transition rocks, because its stratification is in general conformable to that of the nucleus of the Sierra Nevada, and because it is believed to contain no organic remains. It is of a grey or dark colour, and of a compact or finely-grained texture, but it is sometimes, though rarely, friable. It passes downwards by alternations and transitions into clay slate, talcose, or mica slate, and in the upper part it is connected with breccias and limestone conglomerates.

The limestone is generally traversed by veins of calcareous spar and fluor-spar, frequently so arranged as to resemble the stripes in the skin of a zebra. It is also occasionally magnetic, on account of disseminated particles of magnetic iron. The stratification is regular in some places, but it generally presents great inflexions and disruptions, and curves of a thousand different natures. The prevailing strike of the beds is from east to west, but from the western base of the mountain at Castala to near the highest point in the Loma del Sueno and Collado de los Vallentes, it is from north to south. The inclination of the beds varies very much both in direction and inclination—the former being sometimes south, but often north, and occasionally east, and the latter differing from 15 to 45 deg. The beds are, for the greater part, compact, but the higher consist of a breccia, mixed with slate clay and clayey ochres. The stratification in these beds is sometimes well pronounced, and at others less so, being of great thickness. The fragments of the calcareous breccia are angular and of various sizes, and are cemented by carbonate of lime.

In the ravine of Castala protruded masses of trap, containing veins of asbestos, amphibole, and porcellanite, are stated to have dislocated the strata; an inconsiderable vein of trap is also described as interposed between two beds of limestone. The slate clays near the masses of trap are said to be frequently of a green colour.

At the eastern extremity of the chain the limestone is overlaid by beds of gypsum, containing masses and strings or small veins of native sulphur.

There is no doubt that mines in this mountain chain were worked by the Romans. The ore is generally found in nests or masses of inconsiderable size; also in veins and branches of limited extent in any constant direction, crossing each other, and forming almost always communications between the nests. Mr. Lambert is, therefore, induced to consider these metallic accumulations as of contemporaneous origin with the limestone. At the mine of Arnafe, on the western edge of the Sierra, the ore occurs between two beds of limestone, having the same direction east, 20 deg. north, and dipping with them 80 deg. to the N.E. It is one foot thick, and is accompanied by clay. The same agreement has been found in Santa Rosa, Santa Catalina, Cruzados, Trinidad primero, and in all the mines situated upon the western declivity, looking towards Berja.

In the Loma del Sueno, and the interior parts of the Sierra, where the beds incline only 20 to 30 deg., but frequently exhibit great dislocations, which change their position entirely, and often form crests, fissures, and hollows filled with argillaceous substances, are found the greatest masses of ore, lying between the beds, and conforming to all their modifications. Fluor almost always accompanies the galena.

One level has been carried nearly 600 yards in length, from the bottom of a precipice of nearly equal altitude, in order to undermine the rich deposits on the edge of the Loma del Sueno, but hitherto nothing has been met with but compact and slaty limestone. Mr. Lambert, therefore, infers that the ore is more superficial; and he adds, there is no instance of its having been found at a greater depth than 200 yards from the surface.

The lower parts of the fissures which traverse the limestone are frequently filled with fragments of ore, enveloped in a red earthy soil, and associated with angular as well as rounded fragments of limestone. In the alluvial detritus of the ravines, and the dry deltas at their mouth, fragments and masses of ore have been extracted, often in considerable quantities, and at the Pecho de las Lastras, to the extent of 100,000 tons.

In the limestone mountains, which stretch westward from the Sierra de Gador to Marbella, within forty miles of Gibraltar, lead ore is found in variable quantities, but not so abundantly as in the Sierra de Gador.

In conclusion, Mr. Lambert observes, that the improvident method of working the ore in that mountain is fast destroying the best mines—that new trials have not been attended with any thing like success—and that the hardness of the rock renders sinkings very expensive, and compels adventurers with limited funds to abandon their undertakings, unless ore be speedily obtained.—*Abstract of paper by J. Lambert, Esq., F.G.S.: Geo. Trans.*

SCHOOLS OF CIVIL AND MINING ENGINEERING IN THE UNIVERSITIES OF DURHAM AND LONDON.

In the address of the President of the Geological Society at the anniversary meeting lately held, we find the following observations on the provision made for instruction being afforded, having reference to mining and metallurgy; Sir Charles Lemon's Mining School is not mentioned, the intentions of the hon. baronet not having been made public at the period of the address being delivered:—

The increasing demand for education in practical science has been recently provided for in the University of Durham, by the establishment of a course of instruction in civil and mining engineering, with lectures in the mathematical sciences, chemistry, metallurgy, mineralogy, geology, surveying, mapping, and drawing, in addition to ancient and modern languages. To theoretical instruction in such parts of these branches of knowledge as bear more especially on practical engineering, are added at Durham occasional surveying excursions, both in the field and underground, conducted by a practical civil engineer. More than thirty young men have, during the last year, been actively engaged in this new department of academical study.

The locality of Durham, upon the margin of the great Newcastle coalfield, and in the vicinity of the lead mines of Alston Moor and Weardale, is in a peculiar degree favourable for a school of mining and civil engineering, enjoying advantages of position similar to those of the great Saxon school at Freyberg, near the mining districts of the Ertzgebirge and the Hartz.

The University of London also is taking measures to institute examinations of candidates for certificates of proficiency in civil engineering, and the arts and sciences connected with mining.

In University College, London, courses of preparatory experimental lectures and exercises in natural philosophy have, during the last year, been provided for the students in that establishment, who are destined for the profession of civil engineers.

And in King's College, London, a course of lectures in civil engineering, and sciences applied to arts and manufactures, is at this time attended by more than fifty students, who have the opportunity of adding practical to theoretical knowledge in a workshop and laboratory established for their use.

CORROSION OF CAST AND WROUGHT-IRON IN WATER.

BY ROBERT MALLET, A.I.C.E., &c.

[From the "Transactions of the Institution of Civil Engineers."]

This communication is one of those forwarded to the institution in consequence of the council having considered this subject a suitable one to compete for the Telford Premiums; and the author having been long engaged in making experiments on this subject, at the request of the British Association, refers, in the introductory part of this paper, to the contents of that report, which may be viewed as a "*précis*" of the state of our knowledge on the subject to the year 1839, together with original researches, forming the basis of the present results. This communication is accompanied by a most elaborate set of tables of results; but these laborious investigations being yet in progress, the author directs his special attention to so much only of the subject as may be necessary for their elucidation—divesting his remarks as much as possible of a purely chemical character, and confining them to those practical conclusions which are of immediate use and importance to the engineer.

The tables of results are altogether twelve in number. The first five contain the data and results of the chemical or corroding action of sea and fresh water on cast and wrought-iron under five several conditions, during a period of a year and ten months; and these five series of experiments are so co-ordinate with each other as to form one connected and comparable whole, whence the relative rates and absolute amounts of corrosion of cast and wrought-iron—by, 1, clear sea water; 2, foul sea water; 3, clear sea water at temperature 115° F.; 4, foul river water; and, 5, clear river water—may be ascertained. The corrosive action of water and air combined produces on the surface of cast or wrought-iron a state of rust possessing one of the five following characteristics—1, uniform; 2, uniform with plumbago; 3, local; 4, local pitted; 5, tubular—or of two or more of these characteristic conditions in combination; these facts, for eighty-two different specimens of British and Irish cast-iron, together with their original external characters, mode in which they were cast, specific gravity, dimension and weight before and after immersion, loss of weight per square inch of surface—this loss referred to a standard bar, and the weight of water absorbed for clear sea water, compose Table I. The four subsequent tables contain similar results for specimens of iron immersed under the other four conditions mentioned above. These five tables contain also the results of the corrosion of certain cast-irons protected by either of ten several paints or varnishes, the results of which are comparable with those for the unprotected iron. Table VI. exhibits a general comparison of the results set forth in the preceding tables for specimens of iron one inch thick, and reduced to one common or equal period of immersion. Table VII. shows the average loss of all varieties of cast-iron experimented on per square inch of surface. Table VIII. the average calculated amount of corrosion (assumed uniform) of various specimens of cast and wrought-iron per superficial foot of surface at the end of one century. From these tables it appears that the metallic destruction or corrosion of the iron is a maximum, in clear sea water, of the temperature of 115° F.—that it is nearly as great in foul sea water—and a minimum in clear fresh river water.

Iron, under certain circumstances, is subject to a peculiar increase of corrosive action—as, for instance, cast iron piling at the mouth of tidal rivers—from the following cause. The salt water being of greater density than the fresh, forms at certain times of tide an under current, while the upper, or surface water, is fresh; these two strata of different constitution coming in contact with the metal, a voltaic pile of one solid and two fluid elements is formed; one portion of the metal will be in a positive state of electrical action with respect to the other, and the corrosive action on the former portion is augmented. The lower end of an iron pile, for instance, under the circumstances just mentioned, will be positive with respect to the other, and the corrosion of the lower part will be augmented by the negative state of the upper portion, while the upper will be itself preserved in the same proportion. From this theoretical view may be deduced the important practical conclusion, that the lower parts of all castings, subject to this increased action, should have increased scantling.

The increased corrosive action of foul sea water may be referred to the quantity of hydrosulphuric acid disengaged from putrifying animal matter in the mud, converting the hydrated oxides and carbonate of iron into various sulphurets, which again are rapidly oxidised further under certain conditions, and, becoming sulphates, are washed away—hence the rapid decay of iron in the sewage of large cities, and of the bolts of marine engines exposed to the bilge water. The corrosive action being least in fresh water, may be partly referred to this being a worse voltaic conducting fluid than salt water.

It appears also that wrought-iron suffers the greatest loss by corrosion in hot sea water—which fact has led the author to inquiries, with reference to

marine boilers, at what point of concentration of the salt water, whether when most dilute, after the common salt has begun to deposit, or at a further stage of concentration, the corrosive action on wrought-iron is the greatest, and he points out the important practical use which can be made of this information. It appears also, that the removal of the exterior skin of a casting greatly increases the corrosive action of salt water and its combined air, so that the index of corrosion under these circumstances is not much less than that of wrought-iron, and in clear river water is greater.

It farther appears, that chilled cast-iron corrodes faster than the same sort of cast-iron cast in green sand, and that the size, scantling, and perhaps form of a casting, are elements in the rate of its corrosion in water. The explanation of these facts is to be found in the want of homogeneity of substance, and the consequent formation of numerous voltaic couples, by whose action the corrosion is promoted. It is also observable that the corroded surface of all these chilled specimens is tubular.

It appears also, that in castings of equal weight, those of massive scantling have proportionately greater durability than those of attenuated ribs and feathers—hence appears also the great advantage of having all castings (particularly those intended to be submerged) cooled in the sand, so as to insure the greatest possible uniformity of texture. The principles now stated afford an explanation of the fact often observed, that the back ribs of cast-iron sheet piling decay much faster than the faces of the piles. It is also probable that castings in dry sand and loam will, for these reasons, be more durable than those cast in green sand. The general result of all these experiments gives a preference to the Welsh cast iron for aquatic purposes, and to those which possess closeness of grain. Generally, the more homogeneous, the denser and closer grained, and the less graphytic, the smaller is the index of corrosion for any given specimen or make of cast-iron.

[To be continued.]

Welsh Coal Trade.—The difficulties that have always impeded the extension of the demand for the coal of this district, are now so well understood, that the most effectual measures will at length be resorted to, to remove them. An association is being formed in London, for the encouragement and protection of the Welsh coal trade. One of the immediate objects of the society is, the establishment of an effectual mode of testing the coals of the principality, in comparison with the north country and other coals imported into London. Consumers will then have an opportunity to judge of the intrinsic value, or rather of the properties of the articles offered, in competition, without being liable to loss from experimenting. Proprietors will obtain the benefit of ascertained results without being subject to the difficulty of introducing a new variety of coal before trial, or to the prejudice which always prevails in opposing the adoption of a new description of coal, particularly if the slightest modification of flue or draught be a desideratum. The durability of the ordinary bituminous coal, the very peculiar qualities of the anthracite or stone coal, and the great superiority of the intermediate or steam-packet coal of South Wales, are now so well ascertained, that it would appear as if nothing more were required to ensure a preference at all the places of import which can be reached at a moderate rate of freight. It has only been, however, by very small degrees—by great individual exertions—and by very considerable private loss, that the Welsh coal has just begun to obtain a reputation in the port of London. Doubtless a well organised society of the great parties interested in this, as well as in other cases, where the influence is concentrated in London, will have the most beneficial effect.—*Cambrian.*

Plymouth and Exeter Railway.—We are glad to see that the inhabitants of the West are at length awakened to the necessity of railway conveyance, and that they are determined upon having a line to connect Plymouth, Devonport, and Stonehouse, containing a population of 100,000 persons, with Exeter. The immense importance of this junction with the Bristol and Exeter line must be so apparent, that it is unnecessary almost to attempt to substantiate it. A most influential and numerously attended meeting on the subject was held on Wednesday last, at the Royal Hotel, Plymouth, to receive the report of Mr. Rendel, the engineer employed. The Earl of Devon, Sir R. Lopes, J. Collier, Esq., M.P., T. Bewes, Esq., M.P., J. Rundle, Esq., M.P., J. C. Bulteel, Esq., W. H. Hawker, Esq., and an immense number of gentlemen and capitalists were present, and took part in the proceedings with a zeal and energy which augur well for the success of the measure. Three lines, it appears, were suggested by the surveyor, of which the best is, fortunately, the least expensive. So soon as 50,000*l.* is subscribed, another meeting will be held for the election of a provisional committee. The capital will probably be under one million.—*Bristol Journal.*—[A Plymouth correspondent informs us, that shares exceeding the required amount have already been taken, so that the railway may now be fairly considered to be commenced.]

Railroads in Germany.—The engines used on the Prussian and Saxon railroads, are, for the most part, made at Manchester and Bolton. The first, second, and third-class coaches are the same as ours to a tittle; the modes of distributing tickets, the police, flags, &c., are all identical; the terminal stations at Berlin, Dresden, Leipsic, and Magdeburg are wel nigh equal to our best, the intermediate stations much in the same ratio. The railroad between Leipsic and Dresden, seventy miles long (a distance gone over in three hours and a half), was completed for about 600,000*l.* There are but four bridges on the whole length; one tunnel, however, half a mile long, near Dresden, where the hill gradually rising into the mountains of the Ertzgebirge, contracts upon the Elbe, and forms beautiful scenery on each side of the railroad. One strange effect noticed on this railroad is, that in passing through a dense forest of fir trees, the noise echoes back from the multitude of naked stems, as if all the hailstorms in the year were concentrated into one. Another railroad journey is from Leipsic to Magdeburg, seventy-five miles.

Mine Accidents.—P. M. Champion was crushed to death by a large rock, of at least 12 cwt., falling on him in Reeth Consols mine.—David Walters met his death in a colliery at Beaufort in an awful manner. He was employed with others in placing wooden supports for the roof of a coal level, and, conceiving that one might be dispensed with, unfortunately removed it, although warned of the consequences by some of his more experienced companions, when a mass of earth instantly fell upon him.—As two miners (Wood and Morgan) were tamping a hole in the rock at the Lisburne mines, whilst Wood was striking with an iron pricker, the blast suddenly went off and killed him on the spot. Morgan was much injured about the head, but, it is expected, will survive.—A recent gas explosion, which took place in the mines of Ile d'Elbe, at Rive de Gier, proved fatal to thirty-one workmen. Twelve others had fortunately gone out to dinner, or they would have fallen victims to the accident. Of those who remained in the mine two only were found living, and one of them died on being brought into the open air.—As two coal miners (W. Davidson and B. Digney) were at work in Croft pit, near Whitehaven, a large portion of the roof gave way, and they were instantly buried beneath. Every exertion was used to extricate the unfortunate men from their perilous position, but, we regret to state, when their bodies were reached, Davidson was found to be quite dead, and Digney so injured in his spine and other parts of his body as to leave but slight room to hope for his recovery.

Volcanic Eruption.—A letter from Batavia gives the following particulars of the eruption of the volcano called the Gontoer, at Preanger, last spring:—"On the 22d of May the issue of smoke from the crater increased in volume till the evening of the 23d, when it formed a column of between 250 and 300 feet high. At two in the morning of the 24th the ebullition became so violent that the burning lava flowed from the crest half way down the mountain like floods of molten metal. At six o'clock the crater threw up large quantities of sand and gravel, with increasing force, till seven o'clock. Some stones gathered up at Garoet, were the size of hen's eggs; and at Trogong, two miles nearer the mountain, some were found of the size of a man's fist, and others were evidently fragments of rock. This shower of stones lasted till nine o'clock, when the mountain became almost mute; but the sand and gravel rained down so thick that the Gontoer and the surrounding hills became invisible, and the neighbouring places, including Tjikadjang, which lies sixteen miles to the south, were enveloped in a darkness so thick that it became necessary to light the lamps in the houses, and carry torches in the streets. This state of things continued at the more distant parts till three o'clock in the afternoon, and at Garoet and Trogong till six o'clock in the evening. The quantity of matter that came down was so great that the ground at Trogong was covered to the depth of two inches. This coating, however, was sensibly diminished by the rain which fell on the 25th. The aspect of the mountain is completely altered. The crater is three times wider than it was previous to the eruption; and the sides of the mountain, which were covered half-way down with shrubs, plants, and verdure, are now, from its crest to its foot, one mass of black and arid rocks."

ORIGIN OF STEAM NAVIGATION.

One of the first instances, if not the first, of a vessel being absolutely propelled by the power of steam, was that by the Marquis de Jouffrey, which took place upon the Saône, at Lyons, in the year 1782. The next was constructed under the direction of a Mr. Miller, in the year 1789, and succeeded very satisfactorily on the Forth and Clyde Canal—after which, several experiments were made; and that of the celebrated American engineer, Mr. Robert Fulton, was among the most successful, the engines having been supplied and fitted by Messrs. Boulton and Watt. The vessel was named the *Vermont*, which was the first steam-vessel run as a regular packet-boat, having been launched at New York, in the year 1807, and plied between that city and Albany, a distance of about 150 miles, performing the voyage in thirty-two hours, which gives a speed of about five miles an hour (about one-third the speed now obtained). The length of the boat was 133 feet, depth 7 feet, breadth 18 feet; the boiler was twenty feet long, seven feet deep, and eight feet broad, and with only one steam cylinder, which was two feet diameter, and four feet stroke of piston; the paddle-wheels were fifteen feet diameter (dipping two feet into the water), and four feet broad, and the burden was 160 tons. It was not until 1812 that a steam-packet experiment was again attempted in this country, which occurred on the Clyde—another was tried at Bristol; and these were shortly after followed by many others; at length they became pretty general, although the engines were of very imperfect construction, one steam cylinder only being employed, whereas two are now invariably used, each working a crank, fixed upon the axle of the paddle-wheels, and situated at right angles to each other, so that when one is passing the dead points, the other is exerting its greatest power. Steam-packets commenced making regular sea voyages in the year 1818, and they have continued extending their bounds ever since.—*S. C. Brees, C.E.: Glossary of Civil Engineering.*

Railway Superintendence.—A deputation from a committee, formed for the purpose of superintending a petition to government, praying its protection and interference in the management of railways to a greater extent than is contemplated, waited upon the Lord Mayor on Wednesday last, with a view to holding a public meeting at Guildhall. The Lord Mayor concurred in their views, and offered to give them every assistance, suggesting the propriety of a conference with his successor, who, he was assured, would lend his aid. It is expected that the public meeting will shortly take place at Guildhall, and no less than 100 respectable names have been already enrolled.

Polytechnic Institution, Regent-street.—The great improvements at this exhibition, which re-opens on the 30th inst., are progressing with vigour. Already several new rooms have been added—one of which, an apartment for the purpose of lectures and illustrations in experimental philosophy, will command the unqualified approbation of the public. It is in truth a noble and admirably-arranged room. One of the novelties will be a model of the Undercliff of the Isle of Wight, executed by Captain Boscawen Ibbotson, which is said to be without a rival in the world. A room has been prepared expressly for it. The gallery presents a much improved and very handsome appearance, in consequence of its elongation; and altogether the new arrangements are such as to give perfect satisfaction to the public on the one hand, and the depositors on the other.

GOLD AND SILVER.

		£	s.	d.
Foreign Gold in Bars (standard)	...per oz.	£3	17	9
Foreign Gold in Coin, Spanish Doubloons	.....	0	0	0
.. .. .. 20 Franc pieces	.....	0	0	0
New Dollars	.....	0	4	11
Silver in Bars (standard)	.....	0	5	0¼

PURCHASES OF COPPER ORES AT SWANSEA,

October 28.

Purchasers.	Mines.	Tons.	Total.	Price. £ s. d.	Amount. £ s. d.	Total Amount. £ s. d.
1. English Copper Co.	Chili	31		39 11 0	1226 1 0	
	....	9		39 11 0	355 19 0	
			40			1582 0 0
2. Vivian and Sons.	Cobre	116		12 4 0	1415 4 0	
——	....	95		12 4 0	1159 0 0	
——	....	82		21 8 0	1784 16 0	
——	....	44		12 4 0	536 16 0	
——	....	96		20 15 0	1942 8 0	
——	....	91		13 6 0	1210 6 0	
——	....	78		13 1 0	991 16 0	
——	....	68		13 1 0	872 2 0	
——	....	37		12 12 0	466 4 0	
——	Chili	40		17 18 0	716 0 0	
——	....	12		22 16 0	273 12 0	
			752			11328 5 0
3. Williams, Foster & Co.	Cobre	.		15 8 0	....	
			100		—	1340 0 0
Mines Royal 4. Co.	Cobre	..		19 15 6	....	
			61			1206 5 6
			953			15456 10 6

SALE OF COPPER ORES AT SWANSEA.

Copper ores for sale November 11.—Knockmahon 131, ditto 113, ditto 89, ditto 77, ditto 44, ditto 11—Allihies 121, ditto 118, ditto 78—Cobre 95, ditto 78, ditto 36—Llandidno 43, ditto 26—Norway 55—Cuba 26, ditto 15, ditto 9, ditto 2—Chili 47, ditto 10, ditto 3—Cuba 6.—Total 1243 tons.

SALE OF BLACK TIN,

On the 2d of November, at Trevidgia Mine.

Mines.	Tons.	Price.	Amount.	Purchasers.
Trevidgia	7	£57 7 6	£401 12 6	Williams & Co.
ditto	4	50 0 0	25 0 0	Daubuz.

Total tons, 74.—Total amount, £426 12 6.

SALE OF COPPER ORES AT REDRUTH.

Sampled Oct. 21, and sold at Andrew's Hotel, Redruth, Nov. 5.

Mines	Tons	Price £ s. d.	Purchasers	Mines	Tons	Price £ s. d.	Purchasers
Consols	112	5 15 0	Virians.	United H.	66	4 2 0	English Co.
ditto	98	6 14 0	Nevill & Co.	ditto	42	12 10 0	Mines Royal
ditto	86	6 16 0	Williams.	ditto	20	12 5 0	——
ditto	84	5 7 6	Virians.	ditto	15	8 10 6	P. Grenfells.
ditto	80	7 7 0	Williams.	S. Roskear	94	6 5 0	Virians.
ditto	72	8 6 0	Virians.	ditto	65	5 12 6	——
ditto	71	5 1 0	Williams.	ditto	41	1 16 6	P. Grenfells.
ditto	69	5 9 6	——	W. Chance	52	5 17 6	——
ditto	62	5 15 6	Virians.	Wheal Kitty	19	2 5 6	Nevill & Co.
ditto	58	4 18 6	——	Fowey C.	104	5 10 0	Williams.
ditto	12	4 17 6	P. Grenfells.	ditto	101	6 7 0	——
N. Roskear	114	6 4 6	——	Trethellan	104	4 10 6	Mines Royal
ditto	104	8 14 0	Williams.	ditto	90	5 10 6	Freemans.
ditto	94	7 16 0	——	S. Basset	72	8 7 0	Mines Royal
ditto	87	5 7 6	English Co.	ditto	63	4 19 0	Nevill & Co.
ditto	75	7 5 0	Virians.	ditto	58	5 0 6	——
ditto	64	6 15 0	P. Grenfells.	East Pool	65	5 10 6	Williams.
ditto	61	8 9 0	Williams.	ditto	45	11 5 0	Mines Royal
ditto	60	8 9 6	Mines Royal	ditto	35	9 14 6	Williams.
E. Crofty	104	4 19 6	Virians.	ditto	29	8 4 6	P. Grenfells.
ditto	89	3 19 6	——	Tincroft	49	5 0 6	Freemans.
ditto	63	7 1 6	Williams.	ditto	47	3 1 6	——
Longrigg	67	6 14 0	——	ditto	38	2 4 0	——
ditto	62	5 15 6	——	ditto	28	7 5 0	——
Dolcoath	79	4 0 6	Virians.	W. Harriet	46	5 10 6	Nevill & Co.
ditto	68	2 7 6	Vigurs & Co.	ditto	38	3 7 0	English Co.
ditto	52	6 13 0	P. Grenfells.	ditto	24	5 7 0	Freemans.
ditto	48	5 4 0	——	Tretingh C.	54	3 4 6	P. Grenfells.
ditto	41	5 6 0	Mines Royal	ditto	47	6 10 6	Williams.
ditto	33	2 5 6	Virians.	St. Andrew	53	2 1 6	Virians.
United H.	75	4 7 0	Nevill & Co	ditto	41	6 5 6	Williams.
ditto	74	4 2 6	——				

TOTAL PRODUCE.

Consols, Mines	685	£4232 5 0	Fowey Consols	286	£1913 7 0
North Roskear	687	4793 3 6	Trethellan	194	899 17 0
East Wh. Crofty, Longrigg	884	3119 17 6	South Wh. Basset	193	1294 10 0
Dolcoath	312	1899 4 0	East Pool	172	1374 17 6
United Hills	292	1795 9 6	Tincroft	157	861 19 6
South Roskear, Wh. Chance, Wheal Kitty	292	1404 17 0	Wh. Harriet	106	450 11 0
			Tretingh Consols	105	492 11 0
			Wh. St. Andrew	94	367 5 0

Average standard, 114*l.* 12*s.*—Average produce, 7*l.*—Average price, 5*l.* 14*s.* 6*d.*—Quantity of ore, 3567 tons.—Quantity of fine copper, 208 tons 15 cwt.—Amount of money, 22,762*l.* 17*s.* 6*d.*—Average standard of last sale, 114*l.* 14*s.*—Average Produce, 7*l.*

Copper ores for sale on Thursday next, at Andrew's Hotel, Redruth.—Mines and Parcels.—Carn Brea Mines, 469; Wheal Darlington, 300; Wheal Friendship, &c., 200; Wheal Boller, 275; Wheal Harmony and Cardrew, 259; Fowey Consols, 235; Levant, 204; Wheal Trewavas, 201; Providence Mines, 191; Wheal Julia, 124; Wheal Speed, 104; Relistian, 100; Marazion Mines, 91; Wheal Busy, 63; Wheal Treasury, 59; Trevaskus, 50; St. Ives Consols, 49; Wheal Plenty, 34; Wheal Curtis, 17; Nicholl's Ore, 11.—Total, 3514 tons.

Copper ore for sale on Thursday week, at Pearce's Hotel, Truro.—Mines and Parcels.—Treasures, 613; Wheal Jewel, 515; Cook's Kitchen, 308; Poldice, 304; Fowey Consols, 251; Helmonth, 220; Wheal Unity Wood and Wheal Union, 216; Tehiddy Lydia and South Towan, 194; Wheal Maiden and Carharrack, 158; Wheal Whidy, 84; Wheal Vyvyan, 69; Wheal Damsel, 31; Trevarian, 30; Tregullan, 13.—Total, 2879 tons.

PURCHASES OF COPPER ORES AT TRURO.

October 29.

Purchasers.	Mines.	Tons.	Total.	Price. £ s. d.	Each Parcel. £ s. d.	Total amount. £ s. d.
1. Mines Royal Co.	Consolid. Mines	75		9 2 6	684 7 6	
	Tresavean	32		9 12 6	308 0 0	
——	Godolphin	25		14 14 0	514 10 0	
			142			1506 17 6
2. English Copper Co.	United Mines	117		7 3 0	826 11 0	
	....	100		6 14 0	670 0 0	
——	Hallenbeagle	21		4 13 0	96 12 0	
——	Godolphin	62		6 6 0	390 12 0	
			300			1983 15 0
3. Vivian and Sons.	United Mines	136		5 9 0	766 10 0	
——	....	126		4 3 0	522 18 0	
——	....	105		8 2 0	850 10 0	
——	....	43		5 6 0	227 18 0	
——	....	84		4 14 6	398 18 0	
——	Consolid. Mines	87		3 15 0	326 5 0	
——	Hallenbeagle	21		4 12 0	96 12 0	
——	Tretoll	93		5 7 6	499 17 6	
——	....	63		7 4 6	455 3 6	
——	....	44		5 18 6	249 14 0	
——	....	4		17 10 6	70 2 0	
			800			4404 8 0
4. Freeman and Co.	Fowey Consols	102		5 4 6	532 19 0	
——	.. .	33		5 4 6	175 18 6	
——	Tresavean	32		9 12 6	308 0 0	
——	Godolphin	64		6 7 6	406 0 0	
			231			1794 17 6
5. Grenfell and Sons.	United Mines	54		4 16 6	260 11 0	
	....	43		5 6 0	227 18 0	
	....	80		4 16 6	386 0 0	
	....	78		5 15 6	431 11 6	
——	Tresavean	82		4 9 6	366 19 0	
——	....	73		4 7 0	317 11 0	
			410			1980 10 6
6. Sims, Williams, Nevill, and Co.	Consolid. Mines	111		7 0 0	777 0 0	
	....	161		7 11 0	762 11 0	
			272			1539 11 0
7. Williams and Co.	United Mines	54		4 16 6	260 11 0	
	....	107		6 5 0	658 15 0	
——	....	106		4 17 0	514 2 0	
——	....	64		7 10 6	481 12 0	
——	Hallenbeagle	109		4 14 6	515 0 6	
——	....	82		5 1 6	416 3 0	
——	....	20		1 19 0	39 0 0	
——	Fowey Consols	87		5 15 6	502 6 6	
			629			3387 12 0
8. Vigurs and Co.	Hallenbeagle	37		6 4 0	229 8 0	
	....	20		1 19 0	39 0 0	
——	Godolphin	30		2 12 0	78 0 0	
			87			346 8 0
			2866			16003 19 6

METEOROLOGICAL JOURNAL, 1840.

October	Thermometer	Barometer	November	Thermometer	Barometer
Thursd. 29	from 37 to 47	29,29 to 29,32	Sunday 1	.... 33 .. 53	29,53 .. 29,78
Friday.. 30	.... 32 .. 51	29,44 . 29,50	Monday 2	.... 44 .. 54	29,44 .. 29,50
Saturd. 31	.... 26 .. 51	29,60 . 29,53	Tuesday 3	.... 44 . 55	29,47 . 29,39
			Wednes. 4	.... 42 .. 58	29,21 29,32

Wind, S.E. on the 29th ult. and three following days; the 2d instant, S. in the morning, and S.E. in the afternoon and evening; N.E. on the 3d; S. and S.W. on the 4th. On the 29th, cloudy, with frequent showers; the 30th, morning overcast, otherwise clear; the 31st ult., generally clear; the 1st inst., a general cloud, rain in the evening; the 2d, clear, except the morning, rain, with boisterous wind; the 3d, generally cloudy; the 4th, morning cloudy, with rain, otherwise clear.

Rain fallen, .490 of an inch.

NOVEMBER METEORS.—We have to remind our readers, that the next periodic fall of these phenomena may be expected to take place from the 11th to the 13th of the present month.

Admiralty. Charles Henry Adams.

FROM THE LONDON GAZETTE,

Tuesday, November 3.

INSOLVENT.

Thomas Law, jun., Hamer Mill, Lancashire, corn dealer.

BANKRUPTS.

J. Banfield, Cheapside, silversmith. [Swain and Co., Frederick's-place, Old Jewry.
W. Burch, Woolwich, carpenter. [Willoughby and Jaquet, Clifford's Inn.
J. Green, Great Winchester-street, merchant. [Pelle, Great Winchester-street.
V. R. A. Brooks, Robert-street, Hampstead-road, stationer. [Mills, Brunswick-place, City-road. [hall-street.
J. Smith, Eastbourne, Sussex, stationer. [Smith and Weir, Coopers'-
J. Beecham, Dover, plumber. [Gregson and Kewell, Angel court, Throgmorton st.
A. Duff, jun., Fort-street, Spitalfields, silk manufacturer. [Crowder and Maynard, Mansion-house-street. [street, Aldersgate-street.
J. C. Lucas and T. Lucas, Aldersgate-street, druggists. [Wood and Blake, Falcon-
T. Coates, Leeds, coach proprietor. [Smithson and Co., Southampton-buildings.
C. J. Cooke, Bristol, brush manufacturer. [M'Leod and Stenning, London-street.

DIVIDENDS.

Nov. 26, R. Swainborough, Grimsby, Lincolnshire, warehouseman—25, R. Johnston and E. R. Danson, Gracechurch-street, wholesale ironmongers—27, E. Gowen and A. Shanks, Morpeth, Northumberland, common brewers—Dec. 21, J. Richardson, Leeds, wool merchant—Nov. 24, H. Phillinkirk, Leeds, tailor—Dec. 17, T. Laycock, Leeds, cloth manufacturer—Nov. 25, J. P. Butler, Cheltenham, wine merchant—26, W. Harris, Manchester, boarding house keeper—Dec. 1, W. Thrussell, Bridgewater, saddler—Nov. 27, G. Beaumont, Pudsey, Yorkshire, clothier—26, T. Simons, Exeter, builder—23, W. W. Bulley, Liverpool, merchant.

Certificates to be granted, unless cause be shown to the contrary, on or before Nov. 23.

S. Price, Blackburn, machine maker—E. Dale, Barnsley, Yorkshire, linen manufacturer—R. Brown, jun., Crane-court, Fleet-street, publisher—J. Innes, Stanbrewery, Old Brompton, common brewer.

Friday, November 6.

BANKRUPTCIES SUPERSEDED.

William Purchase Owen, Exeter, wine merchant.
Joseph Thompson, Aston, nigh Birmingham, dealer and chapman.

BANKRUPTS.

H. Hays, Regent-street, engraver. [A'Beckett and Co., Staple Inn.
W. Mason, Fore-street, City, leather seller. [Keddell and Co., Fenchurch-street.
W. Hamilton, Leadenhall-street, merchant. [Pelle, Great Winchester-street.
R. F. Redhouse, Gloucester-place, Old Kent-road, tailor. [Foster, Laurence Pountney-place. [Southampton-buildings.
H. T. Roberts, New North-street, Red Lion-square, lodging house keeper. [Platt,
J. Smith, Stafford, innkeeper. [Rushworth, Staple Inn.
C. Dunderdale, Manchester, merchant. [Milne and Co., Temple.
R. Judd, Melton Mowbray, Leicestershire, draper. [Austen and Hobson, Raymond-buildings, Gray's Inn.
T. G. Hill, Walsall, Staffordshire, plumber. [Richards & Co., Lincoln's Inn-fields.
J. Eccles, Bolton-le-Moors, Lancashire, carver and gilder. [Milne & Co., Temple.

DIVIDENDS.

Nov. 27, H. Nicholes, Piccadilly, confectioner—30, R. A. Phelps, Pancras-lane, Queen-street, Cheapside, ink manufacturer—F. F. Carruthers, Manchester, distiller—28, C. Colfson, Pancras-lane, city, wine merchant—Dec. 1, W. Bridger, Uxbridge, draper—Nov. 26, E. Humphrys, High-street, Lambeth, engineer—Dec. 5, J. Ingleman, Cirencester, Gloucestershire, blacksmith—Nov. 30, A. Fussell, Oxford, ironmonger—A. Coster, Oxford, painter—H. O. Cadney, Halifax, Yorkshire, corn dealer—J. H. Dowling, Gloucester, scrivener—Dec. 2, E. Knight, Southampton, upholsterer—3, J. Baker, Taunton, Somersetshire, tea dealer—2, H. H. Byron, Lincoln, corn merchant—Nov. 30, T. Andrews, Wednesbury, Staffordshire, builder—Dec. 4, H. Kershaw, Manchester twist dealer—Nov. 28, C. Absalom, Newbury, Berkshire grocer—3, Monks and J. Monks, Bolton-le-Moors, Lancashire, iron founders.

Certificates to be granted, unless cause be shown to the contrary, on or before November 27.

C. Dean, Manchester, ironmaster—J. Barham, Leeds, Yorkshire, worsted spinner—W. Stead, Bromyard-bridge, Yorkshire, corn miller—S. Cookson, Manchester, commission agent—H. Suffell, Regent-street, hosier—E. Holgate, Manchester, calender—J. M'Gregor, Manchester, calico printer.

COAL MARKET, LONDON.

MONDAY.

Price of coals per ton at the close of the market.—Buddle's West Hartley 19—Carr's Hartley 19—East Gateshead 17 6—Hebburn Main 22—Original Windsor's Pontop 18 6—Ord's Redheugh 17 6—Russell's High Main 19—Townley 18—West Hartley 20—Wylam 19 6—Wall's End Bell and Brown 21 6—Brewicke and Co. 22 6—Goodal's 22 6—Heaton 22 6—Hilda 22—Killingworth 22—Northumberland 21 6—Percy hen-ham 21—Riddell's 22 6—Belmont 18—Harwell 18 9—Helton 20 9—Lyons 22 6—Pemberton 22 6—Russell's Hetton 23 9—Whitwell 22 9—Caradoc Hartlepool 23 9—Hartlepool 24 9—Kelloe 23 9—Tennant's Hartlepool 23 9—Adelaide 23 6—Barrett 22 6—Barrington Tees 21—Richardson's Tees 22—Tees 23 9—Hartley 20—James and Aubrey's Stone Coals 30—Richardson's Nuts 15 6—Eden Main 22 6.—Ships arrived, 23.

WEDNESDAY.

Charlotte Main 20—Carr's Hartley 19—Hebburn Main 22—Original Windsor's Pontop 18 6—Smith's Pontop 18—South Hartley 19 6—Tanfield Moor 22—Townley 18—Wylam 19 6—Wall's End Heaton 21 9—Holmside 20 9—Killingworth 21 9—Percy Benchem 21—Perkins 21—Riddell's 22—Braddyll's Hetton 23—Harwell 20 6—Hetton 23 6—Russell's Hetton 23 6—Stewart's 24—Kelloe 23 9—Adelaide 23 6—Barrington Tees 21—Gordon 21 3—Seymour Tees 22 9—Tees 23 6—Cowpen 16 6—James and Aubrey's Stone Coals 30—Wetwood 18 6.—Ships arrived, 2.

FRIDAY.

Adair's 18—Buddle's West Hartley 19—Hebburn Main 21 9—Original Windsor's Pontop 18 6—Pontop Windsor 18—Russell's High Main 19—Wellington 22—Wall's End Newicke and Co. 22—Chilwell 19—Heaton 21 9—Holmside 20 9—Killingworth 21 9—Hetton 23 6—Lambton 24 6—Lyons's 22 6—Stewart's 24—Harlepool 23 9—Kelloe 23 9—Tennant's Hartlepool 23 6—Barrington Tees 21—Cleadon Tees 22—Seymour Tees 22 9—Bell's Primrose 16.—Ships arrived, 2.

PRICES OF STOCKS.

ENGLISH PUBLIC FUNDS

	Saturday.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.
Bank Stock, 7 per Cent.	161½ 60½	....	161 59	159 60	159	159½
3 per Cent. Red. Anns.	86½ ½	86½ ½	86½ 7½	87½ ½	87½ ½	87½ ½
3 per Cent. Consols	87½ ½	87½ ½	87½ 8½	88½ ½	88½ ½	88½ ½
3½ per Cent. Anns. 1818.	96	95	96	....	....	96½
3 per Cent. Anns. 1726.	....	....	....	....	....	....
3½ per Cent. Red. Anns.	95½ 6	95½ 6	96½ ½	96½ ½	96½ ½	96½ ½
New 3½ per Cent. Anns.	97½ ½	97½ 7	96½ 7	97½ ½	97½ ½	97½ ½
New 5 per Cent.	....	....	....	....	....	....
Long Anns. 1860.	12⅞	12⅞	12⅞	12⅞	12⅞	12⅞
Anns. for 30 Years 1859.	12⅞	12⅞	12⅞	....	....	12⅞
Ditto 1860.	13	....	12⅞	12⅞	....	12 13
India Stock, 10½ per Cent.	243	242	240 2	243	243	243
South Sea Stock, 3½ per Cent.	....	....	....	....	....	98½
Ditto Old Ann. 3 per Cent.	85½	85½	....	85½	85½	....
Ditto New Ann. 3 per Cent.	86½	....	....	....	86½	....
3 per Cent. Anns. 1751	....	....	....	....	....	....
India Bonds, 3 per Cent.	16 12 dis	15 dis	15 12 dis	12 15 dis	13 dis	12 dis
Exchequer Bills, £1000. 24d	3 1	2 dis par	1 3 dis	2 dis par	1 pm	1 dis 1 dis 1 pm
Ditto, £500.	par	2 pm par	par 2 dis	par 2 pm	1 3 pm	par 3 pm
Ditto Small.	2 dis 1 pm	2 pm par	1 dis 1 pm	3 1 pm	1 4 pm	2 4 pm
Ditto Advertised.	....	....	....	....	....	....
3 p. Cent. Cons. for Act. Nov. 26	87½ 8	87½ 8	88½ ½	88½ ½	88½ ½	88½ ½
Bank Stock for Op. Nov. 26.	....	....	161½	....	....	....
India Stock for Ac. Nov. 26	....	....	....	....	....	....

BANK OF ENGLAND.—TRANSFER BOOKS.

	SHUT.		OPEN.	
3 per Cent. Consols	Wednesday, Dec. 2, 1840.		Friday	Jan. 15, 1841.
New 3½ per Cent.	Thursday	„ 3	Friday	„ 15
3 per Cent., 1726.	Thursday	„ 10	Tuesday	„ 12
New 5 per Cent.	Friday	„ 11	Tuesday	„ 12
Annuities Terms of years.	Monday	„ 7	Friday	„ 22
East India Stock	Thursday	„ 3	Thursday	„ 14

FOREIGN STOCKS.

	Saturday.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.
Austrian, 5 per Cent.	....	....	....	....	....	....
Belgian, 5 per Cent.	....	....	97	98 7½	....	....
Brazilian	....	74½	74	....	74	....
Ditto, 1829	....	....	....	....	....	....
Buenos Ayres, 6 per Cent.	....	....	....	....	....	....
Cuba, 6 per Cent.	....	....	....	....	....	....
Chilian, 6 per Cent.	52½	52	....	....	52 3	52½ 3
Colombian, 6 per Cent.	....	....	22½	....	....	22½
Ditto, 1824, ditto	23½ ½	23½ ½	23½	23½	23½	23½ ½
Danish, 5 per Cent.	75½ ½	....	....	....	....	....
Mexican, 5 per Cent.	....	27½ ½	27½ ½	27½ ½	27½ ½	27½ ½
Ditto, deferred do.	9	8½ ½	....	8½	....	8½ 9
Ditto, 1825, 6 per Cent.	....	....	....	....	....	....
Ditto, def. do. 6 per Cent.	....	....	....	....	....	....
Ditto 5 p. Ct. Consol., 1837	....	....	....	....	....	....
Ditto Deferred	....	....	....	....	....	....
Neapolitan, 5 per Cent, 1824	....	....	....	....	....	....
Peruvian, 6 per Cent.	....	....	....	....	....	....
Portuguese, 5 per Cent.	....	....	....	....	....	....
Ditto, New 5 per Cent.	32½	32½ 3½	32½ ½	33½ ½	33½	33½
Ditto, 1837, 5 per Cent.	32	32½	....	32½ ½	....	32½
Ditto, 3 per Cent.	21½	21½ ½	21½	21½	21½	22
Russian, 1822, 5 per Cent.	....	111½	111½	112	....	....
Spanish, 5 per Cent. Consols	21½ ½	21½ ½	21½ ½	21½ ½	21½ ½	21½ ½
Ditto, passive	....	....	....	....	5½	....
Ditto, deferred	10½ ½	10½ ½	....	....	10½	....
Dutch, 2½ per Cent.	50½	50½ ½	50½ ½	50½ 1	51½ 1	50½ 1
Ditto, 5 per Cent.	96	96½	96½ 7½	97 ½	97½ ½	....
Ditto, 5 New, 1837	....	92½	....	94½ 5½	....	93½ 4½

FRENCH FUNDS.

	PARIS					LONDON.	
	Oct 29	Oct 31	Nov 2	Nov 3	Nov 4	Oct 31	Nov 3
5 per Cent. Ann.	100f. 90c.	100f. 80c.	100f. 25c.	100f. 90c.	100f. 40c.	....	....
Rs. on Lond. 1 mth.	25f. 7½c.	25f. 7½c.	25f. 7½c.	25f. 7½c.	25f. 7½c.	....	....
ditto 3 mths.	24f. 85c.	24f. 90c.	24f. 87c.	24f. 85c.	24f. 85c.	....	....
4½ per Cent. Ann.	....	99f. 50c.	99f. 50c.	100f. 25c.	100f. 0c.	....	....
Exchange	....	....	....	....	....	....	....
4 per Cent. Ann.	92f. 50c.	93f. 50c.	....	95f. 25c.	95f. 0c.	....	....
Exchange	....	....	....	....	....	....	....
3 per cent.	73f. 25c.	73f. 85c.	76f. 70c.	77f. 35c.	76f. 35c.	74f. 0c.	73f. 50c.
Exchange	....	....	....	....	....	25f. 40c.	25f. 40c.
Bank Shares	3000f.	3125f.	3170f.	3150f.	3070f.	....	....

IRISH FUNDS,

Nov. 5, 1840.

Bank Stock	171½	Royal Canal Stock	—
Government Debentures 3½ per ct.	90	Patriotic Insurance	7½
Ditto Stock 3½ per ct.	96½	Provin. Bank of Ireland	45
Ditto New 3½ per ct.	96½	Hibernian Bank	25½
Ditto ditto, reduced 4 per ct.	—	Grand Canal Stock	171½
Canals 3 per ct.	—	Mining Co. of Ireland	15½
City Debentures 4 per ct.	—	City of Dublin Steam Co.	118
Exchequer Bills 3d per diem	—	Kingstown Railway	75

AMERICAN FUNDS.

Reputable	Buyers	Sellers	Reputable	Buyers	Sellers
New York 5 1845	93 6	93 94	Louisiana 5 1844, 7, 50, 2.	65½ 6½	—
.. 1854	—	—	Mississipi .. 6 1861, 6, 71	—	—
.. 1860	—	93	INCORPORATED BANKS.		
Pennsylva. 5 1854	84½	—	Per Cent.		
.. 1854	—	—	United States 6 1866	14	63
.. 1858	92	92	Louisiana State .. 10 1870	—	—
.. 1860, 62	—	—	Bank of Louisiana 8 1870	—	—
.. 1864	82½ 3½	—	N. Orleans, Canal & B. Co.	—	—
Maryland 5 1868	82	90	City Bank	—	—
Ohio 6 1856, 60	99 91	—	New York Life and Trust 5	—	—
South Carolina 5 1868	—	—	Tenessee Planters 9	—	—
Tennessee 6 1869	83	—	Mississippi .. 10	—	—
Virginia 6 1957	98	—	Exchange at New York	—	109½

COURSE OF EXCHANGE.

FRIDAY, Nov. 6, 1840.

	Usance payment	Usance. Equivalent to Change			Usance payment	Usance. Equivalent to Change
Amsterdam	12 5	11 2½	12 2½	Barcelona	55½	— —
Ditto at Sight	12 2	12 —	— —	Seville	55½	— —
Rotterdam	12 5½	12 2½	— —	Gibraltar p. S. d.	48	— —
Antwerp	12 5	12 1½	12 2	Leghorn	50 55	50 75 50 50
Hamburgh Mcc. B.	13 10½	13 7½	13 7½	Genoa	25 75	25 62 25 87½
Altona	13 11	— —	— —	Milan	31	— —
Paris, 3 days' sight	25 55	25 20	25 25	Venice, p. d. S. d.	47	— —
Ditto	25 60	25 47½	25 52½	Naples	40	40½ 40½
Marseilles	25 65	— —	— —	Palermo	122½ on	122½ 122½
Bordeaux	25 65	— —	— —	Messina	122½	122½ 122
Frankfort on Main	149	148½	149½	Lisbon	55½	55½ 55½
Petersburg p. rouble	8⅞	— —	—	Oporto	55½	55½ —
Berlin .. cur. doll.	7	— —	—	Rio Janeiro	27½	— —
Vienna eff 4o.	10 3	9 50	10 —	Bahia	27	— —
Trieste ditto	10 5	10 1½	10 2½	Buenos Ayres	—	— —
Madrid	36	36½	36½	Madras	—	— —
Cadiz	36	36½	36½	New York	46½	— —
Bilboa	35½	—	—	Philadelphia	46	— —

PRICES OF MATERIALS IN CORNWALL

AS SUPPLIED AT THE PRINCIPAL MINES IN THE FOLLOWING MONTHS.

	3 & 4	3 & 6			3 & 4	3 & 6
	s. d.	s. d.			s. d.	s. d.
Common iron, per cwt.	8s 0d	8s 0d	Iron-wire sieves, each	2s 9d	2s 9d
Half-inch square ditto	10 6	9 6	Iron-wire work, per foot	6	6
Best tough whim chain	20 0	20 0	Board nails, per cwt	19 6	19 6
Boiler plates	14 0	13 6	Half-board ditto, per 1000	5 0	5 0
Hoop iron	13 6	12 0	Hatch ditto	3 8	3 8
Nail rods	14 6	11 0	Half-hatch ditto	3 0	3 0
Miners' shovels	33 0	32 0	Linseed oil, per gallon	3 8	3 8
Charcoal iron	14 6	14 6	Rape ditto	5 6	5 6
Gunpowder, per 100 lbs.	40 0	40 0	Birch, per foot	2 6	2 6
Leather, per lb.	1 10	1 10	Pine, ...	1 6	1 6
Coals, per ton, at quay	14 0	13 0	Sheet lead, per cwt.	22 0	22 0
Candles, per dozen lbs.	5 8	5 9	Barrow bends	11 6	11 6
Tallow, per cwt.	50 6	51 6	H 2 steel (112 lbs.)	52 0	52 0
Ropes	55 0	55 6	2s. nails	17 9	17 6
Flat ropes	42 0	40 0	Pick hills	1 5	1 4
Hemp	0 5	0 5	Shovel hills	2 0	1 9
White yarn, per cwt.	57 0	57 0	White ground lead	26 0	25 0
White rope	38 0	38 0	Red lead	24 6	25 0
Brass-wire sieves, each	3 3	3 7	Best rolled iron	11 6	11 6
Ditto machine	13 0	13 0	Blistered steel	42 0	40 0

, The figures at the top of the columns refer to months—as May 5, June 6, &c.

TIDE TABLE.

HIGH WATER AT LONDON BRIDGE, for the week ending Nov. 13.

	Satur.	Sunday.	Mond	Tuesd.	Wedn.	Thurs.	Friday
Morning	11 54	0 14	1 0	1 44	2 29	3 15	4 5
Afternoon	— —	0 36	1 20	2 9	2 52	3 42	4 29

PRICES OF SHARES.

BRITISH MINES.

No. of Shares.	Name of Company.	Amount of Share.	Amount paid.	Highest Price.	Lowest Price.	Prices paid.
500	Anglesey	100	5	10	8	8½
1,800	Arigna Iron & Coal Co.	50	34	9½	9½	9½
4,000	Bissoe Bridge	5	5	2	1½	1½
8,000	Blaenavon	50	45	40	40	40
20,000	British Iron	100	55	2	2	2
512	Beam	..	8	10	10	10
4,000	Bedford	..	..	1	2½	2½
100	Copper Bottom	..	41	30	30	30
2,500	Cornubian Lead Co.	..	3½	2	1½	2
6,000	Cornwall Great United	12	10½	1½	1	1½
1,000	Cuddra	10	10	7	6	6 4
5,000	Dartmoor Consols	5	5	1	1	1
10,000	DurhamCountyCoalCo.	50	37	..	..	—
2,000	Danescombe	..	..	..	..	—
2,000	De Dunstanville	..	..	..	..	—
1,000	Duffield	..	30	8½	8	12
2,000	East Cornwall Tin, &c.	6	6	2	2	2
1,200	East Mulberry Hills	3½	3½	1	1	1
4,000	English	25	12½	1	1	1
3,200	Great Wh. Prosper	25	7½	6½	6½	6½
4,000	Great Wh. Charlotte	3	3	1½	1	1½
2,000	Gernick	..	..	6	6	6
1,000	Harrowbarrow	..	..	..	..	—
10,000	Hibernian	50	12½	4	3½	3½
1,000	Holmbush	100	4	43	42	43 2
2,00	Isle of Serk (Guernsey)	..	9	1½	1½	1½
640	Llwyndyfaen	..	5	..	..	—
70,000	Mining Co. of Ireland	25	7	3½	15	15
6,000	Perran Consols	4½	4½	1	1	1
6,000	Polbreen	5	4	1	1	1
2,000	Relistian	..	..	5	4½	4½ 5
5,000	Redmoor Consolidated	5	5	1½	½	1 1½
10,000	Rhymney Iron	50	50	40	40	40
800	South Towan	10	10	1½	1½	1½
Pro. 3,000 / Con. 2,000	Talacre	50 / 6	5 / 1	.. / ..	.. / ..	— / —
4,000	Tregollan	5	4	2	2½	
4,000	Treleigh Consols	5	4½	1½	1½	1½
4,505	Tamar Consols	5	3	2	1½	2 1½
6,000	Tin Croft	10	6½	4	4	4
198	Trevaskus	..	60	45	45	45
4,300	Tretoil	..	1½	3	2½	3
4,000	United Hills	5	5	6½	6	6½ 6
3,300	West Cork	50	50	..	..	—
5,000	Wh. Harm. & Montague	10	10	½	½	½
6,000	Wicklow Copper	5	5	8	7½	8
3,828	West Wheal Jewel	8	8	4½	4	4½
5,000	Wheal Sisters	..	4	½	½	½
1,000	Wheal Julia	..	..	5½	5	5½
3,300	Wheal Leeds	2½	..	..	..	—

FOREIGN MINES.

5,000	Alten Mining Company	15	12½	10½	10½	8
10,000	Anglo Mexican Co.	100	100	½	1½	1½
3,374	Do. Subscription	25	25	1½	1½	1
2,000	Bolanos	150	150	35	35	27½
	Ditto Scrip	..	15	17½	17½	17½
10,000	Brazilian Imperial	35	20	13½	13	13½
10,000	Bolivar	20	20	2	2	2
10,000	Ditto Scrip	10	10	2	2	2
10,000	Cata Branca } Brazilian	10	6½	9	9	9
10,000	Conceiçao.. } Co.	10	4	..	..	—
10,000	Candonga Mining Co.	20	8½	..	..	—
	Ditto registered	20	7½	..	..	—
12,000	Cobre Copper Company	40	40	32	1	24
8,500	Colombian Co. regis.	55	55	3	3	2
1,500	Ditto, New	11	11	..	..	—
10,000	Copiapo Mining Co.	20	13½	9½	9½	8½
20,000	General Mining Association	20	18	6	6	6
5,351	Mexican Company	60	38	2	2	2
12,000	Mocambos and Cocaes	25	25	8	8	8
5,000	Minas Geraes	20	12	..	..	—
2,000	New Granada	10	10	..	..	—
14,582	Real del Monte, regis.	54½	3½	2	2	2½
	Do. unregistered	54½	..	3	3	1
	Ditto Loan Notes	150	50	16	16	16
2,500	Rio de Anori	..	3½	..	..	—
7,000	Royal Santiago	65	10	15	14	15
11,000	St. John d'el Rey	..	14½	2½	2½	2½
30,000	United Mexican	..	40	4	3	3
	Black Scrip, addl. capital	14	5	4½	4	4
	Red New Scrip	5	5	6½	6½	6½
14,000	Zacatecas Mining Co	5	5	..	..	—

RAILWAYS.

2,000	Aylesbury	20	20	..	..	—
6,500	Birmingham and Derby	100	100	70	70	64
9,500	Birming. & Gloucester	100	90	69	58½	59½
7,500	Birm. Brist. & Th. Junc.	20	20	42	42	42
600	Bolton and Leigh	100	100	60	60	60
641	Ditto ½ Shares	..	25	..	..	—
15,000	Bristol and Exeter	100	60	34	32	34
350	Cheltenham	100	100	14	14	14½
5,000	Chester & Birkenhead	50	30	50½	50½	50½
	Do. ½ Shares	..	25	12½	12½	12½
5,000	Chester and Crewe	50	45	60½	60½	60½
7,500	Chelten. & Gt. Western	100	55	21	21	21
14,000	Cheltenham & Oxford	100	5	64	64	64
2,000	Clarence	100	100	27	27	27
6,000	Dublin and Drogheda	100	15	4	4	4½
	Dublin and Kingstown	100	90	80	80	—
8,000	Dublin and Kilkenny	100	7½	..	..	—
800	Durham Junction	100	100	100	100	100
2,040	Durham & Sunderland	50	50	30	30	30
	Danube and Maine	..	..	3	30	3
40,000	Eastern Counties	25	23	8	8	8
5,000	Edinb. Leith & Newha.	20	15	3	3	3
18,000	Edinburgh & Glasgow	50	35	30	28	29
2,500	Forest of Dean	100	50	40	40	40
12,500	Glasg., Paisley & Ayrsh.	50	35	35	35	35
10,000	Glasg., Paisley, & Greenock.	25	28	22	22	22
10,000	Grand Junction	100	90	212	207	212
	Do. ½ Shares	50	40	13	11	8½
	Do. ¼ do.	25	25	6½	6½	5½
10,000	Great North of England	100	70	55	55	55
28,000	Great Western	100	65	79	76	78 3
25,000	Ditto New	50	40	44	43½	47 6½
6,000	Gosport Junction	50	25	31	31	31
8,000	Gt. Leinster & Munster	100	5	5	4½	4
8,000	Hull and Selby	50	50	45	45	45
2,000	Hartlepool Dock & Rw.	..	100	14	140	140
5,000	Lancaster & Preston	50	42½	33½	33½	32½
2,100	Leeds and Selby	100	50	35	35	35
2,000	Leicester and Swanns	50	50	65	65	55½
5,100	Liverpool & Manchester	100	100	193	192	193
12,021	Do. New Shares	25	19	5½	5½	5½
7,000	Do. ¼ do.	50	50	87	85	85
24,000	Lond. & Blackwall	25	20	15	14	14½ 15
	Do. New	..	..	27½	27½	27½
32,000	London and Greenwich	20	20	6½	6½	6½ 6
	Ditto New	..	20	16	16	16
25,000	London and Birmingh.	100	90	65	55	57
25,000	Do. ¼ shares	25	5	24	24	24½
	Do. New	52	24	47	45	44½
20,000	London & Croydon Tr.	20	14½	10½	10½	10½ 11
6,334	Do. Scrip	9	9	12½	12	12
30,000	London & Sth. Western	50	36½	34½	34½	34½ 2
36,000	London & Brighton	50	40	26½	26½	26½
	London Grand Junc.	100	100	39½	39½	39½
2,000	Llanelly	100	70	73	73	—
7,000	Manchester & Sheffield	100	53	4	4½	4
14,000	Manchester and Chester	..	21	..	..	—
13,000	Manchester and Leeds	100	70	95	91	91
12,000	Do. (New)	50	25	35½	32	32½
10,000	Manchest. South Union	100	5	21½	21½	21½
1,000	Manchester & Oldham	100	..	..	..	—
30,000	Manchester & Birming.	70	35	20	19½	20 4
15	Extension	70	7	4½	4	3
3,600	Maryport & Carlisle	50	4	12	7	7
10,000	Midland Counties	100	100	74½	74	74½ 5
3,000	Newcastle and Carlisle	100	100	105	104	104
3,600	Ditto New	25	25	26	26	26
12,000	North Midland	100	100	78	77½	78
15,000	Ditto (New)	50	50	37	37	37
12,000	Northern and Eastern	100	55	24	24	24
6,000	North Union	100	75	85½	77½	85½
2,500	Preston and Wyre	50	50	45	45	45
6,000	Ditto (New)	25	15	..	..	—
1,000	Stanhope and Tyne	100	100	..	..	—
1,700	Stockton & Darlington	100	100	175	175	175
1,000	Do. ½ Shares	50	50	..	..	55
3,000	South Durham	50	24	..	..	—
4,000	Sheffield & Rotherham	25	25	..	..	31
70,000	South Eastern	50	50	8½	8½	8½
5,000	Taff Vale	100	95	87½	87½	87½
9,000	Thames Haven	50	7½	4	4	4
3,500	Warrington & Newton	100	100	..	..	—
8,000	Westminster Kirkcaldy	50	2	2	2	2
1,000	West Durham	10	8½	8	8	8½
4,000	York & North Midland	50	50	63	62½	63

PRICES OF SHARES.

MISCELLANEOUS.

No. of Shares.	Name of Company.	Amount of Share.	Amount paid.	Highest Price.	Lowest Price.	Prices paid.
10,000	Anglo Mexican Mint	10	10	10½	10½	10½
10,000	Anti Dry Rot	25	18½	5	5 3	
10,000	Asphalte (Claringe)	20	5	½	½	
10,000	Assam Tea	50	12½	12	12	12
10,000	Australian Agricultur.	100	28½	29	29	29
8,600	Brit. Rock & Patent Salt	50	35	13	13	13
8,000	Bahia Steam	10	8	1½	1½	1½
2,500	Bitumen Eastern, &c.	20	3	½	½	
6,000	Brit. Americ. Land Co.	50	35½	10	10	10
20,000	Brit. Agricn. Loan Co.	100	..	..	..	—
6,000	Canada Company	100	32½	34	34	34
10,000	Canada (Upper) Bonds	..	..	86	86½	86½
	City Bonds, div. 4½	..	..	101	100	100
5,000	Eastern Coast of Central America [Deb.	20	17½	2½	2½	2½
5,000	Droitwich Patent Salt	25	25	20	20	20
2,500	Essex Marine Salt	20	8	..	..	—
1,000	Equitable Discount So.	100	20	..	..	—
2,700	Equitable Rever. Soc.	100	55	53	53	53
20,000	General Steam Navig.	15	14	26	26	26½
2,100	Hungerford Market	100	100	31½	31½	31½
	Hudson's Bay Stock	100	100	268	268	268
10,000	Irish Waste Land Co.	50	3	½	½	
8,000	Lond. Rever. Inter. So.	50	10	5	..	—
1,800	London Corn Exchan.	56	37½	..	25	—
8,000	Lond. Canotchouc Co.	12½	12½	5	5 5	
5000	London Cemetery Co.	20	18	18	18	18
20,000	Mexican South Amer.	10	7	..	..	—
	New Corn Ex.	..	37½	20½	20½	20½
	New Brunswick (Land)	..	60	12	12	12
	Rolling & Com. Iron	25	5	6	6	6
10,000	Rio Doce	25	6	½	½	
2,754	Rever. Interest Society	100	100	102½	102	102½ 5
2,633	Ditto New	100	100	102½	102	102½
15,000	Royal Mail Steam-pk.	100	20	17	17	17
10,000	South Australian	25	17½	21	21	21
	Ship Ow. Towing Co.	10	7½	6½	6½	6½
4,000	Thames Tunnel	50	50	10	10	10
10,000	Van Diemen's Land	100	18½	9	9	9

CANALS.

No. of Shares.	Name of Company.	Amount of Share.	Amount Paid.	Price.	Dividend per Ann.	Next Dividend Payable.
1,760	Ashton and Oldham	98	98	113	7	Sept.
1,482	Ashby-de-la-Zouch	113	113	74	4	Oct.
720	Barnsley	160	160	300	14	July
1,260	Basingstoke	100	100	55	5	—
1,005	Brecknock & Abergav.	150	150	100	5½	—
8,000	Birm. ng. 1-16th Share	79½	79½	202	10	Dec.
4,000	Do. & Liverpool Junct.	100	100	26½	..	—
477	Bolton and Bury	250	250	..	6	Jan.
712	Bridgwater & Taunton	100	100	70	3	Aug.
400	Chelmer & Blackwater	100	100	101	5	Jan.
16,000	Carlisle	..	21½	..	..	—
500	Coventry	100	100	650	41	Nov.
1,500	Chesterfield	..	..	..	..	—
460	Cromford	100	100	350	27	July
4,546	Croydon	31½	31½	3½	..	—
11,816	Do. Bonds	..	..	..	5	Oct.
20,000	Danube and Mayne	41½	41½	31	4	—
2,050½	Dudley	100	100	98	44	Sept.
600	Derby	100	100	136	13	July
3,575½	Ellesmere & Chester	133	133	81	4	Sept.
231	Erewash	100	100	750	62	Oct.
1,297	Forth and Clyde	400	400	430	30	July
11,600	Grand Junction	100	100	130	8	June
2,840½	Grand Union	100	100	26	1½	Oct.
1,500	Grand Surrey	100	100	16	..	Sept.
120,000	Do. (optional) Loan	100	100	63	4	Dec.
3,096	Grand Western	100	100	10	..	—
600	Glamorganshire	172½	172½	..	13½	Sept.
1,960	Gloucester & Berkle	100	100	16	..	
269	Do. (optional) Notes	60	60	..	..	—
740	Grantham	150	150	225	12	May
6,233	Huddersfield	57½	57½	26	2	Sept.
100	Kensington	100	100	10	..	—
25,328	Kennet and Avon	40	40	27	1½	Sept.
11,604½	Lancaster	47½	47½	28	1½	Mar.
2,897½	Leeds and Liverpool	100	100	780	30	Nov.
1½	Leeds & Liverpl. New	80	..	..	16	—
545	Leicester	140	140	150	15½	July
1,897	Leicester & Northam	83½	83½	73½	5½	Dec.
550	Lisk. and Looe Un.	25	25	..	..	—
70	Loughborough	142½	142½	2220	180	July
	Manches., Bol. & Bury	..	7½	66½	..	—
2,100	Monmouthshire	100	100	300	10	Dec.
700	Montgomeryshire	100	100	90	4½	Aug.
250	Melton Mowbray	100	100	210	10	July
500	Mersey and Irwell	100	100	560	25	Oct.
3,000